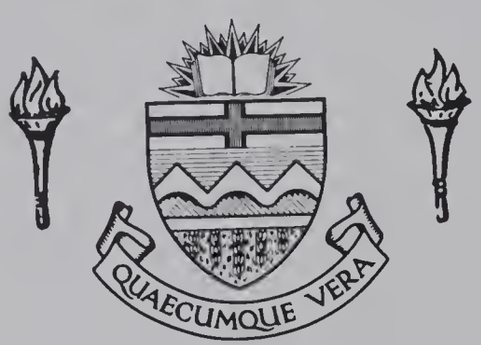

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Abstract

It has been suggested that a general increase in affluence and the mass production of consumer goods in "post-industrial society" have leveled consumption along class or status lines. The emphasis placed on consumption by resource (boom) town inhabitants and the relative absence of persons in the lowest or highest strata in Fort McMurray mean that any leveling in stratification should be more pronounced there than in society generally. However, an examination of the predictors of seven consumption measures (vehicles, durables, investments, leisure, household level of living, credit card use, and debt) for a 1979 sample of 430 households in Fort McMurray lead to the observation that consumption is stratified along occupational prestige and economic class dimensions. The relatively high incomes and "conspicuous consumption" of Fort McMurray residents does not appear to have reduced inequalities of lifestyle associated with different status groups and with demographic distinctions.

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1. Chapter One: Statement and Context of the Problem

Consumption is a material manifestation of lifestyle and as such a contributing factor to the stratification hierarchy. This thesis examines consumption in the prosperous community of Fort McMurray, a growing single industry town in Northern Alberta. Generally, consumption is presumed to be prevalent in these communities, and is frequently regarded as a major motivation behind migration to resource towns (Goldthorpe and Lockwood, 1969, Lucas, 1971, Van Dyke and Loberg, 1978, Gartrell et al, 1980). Yet systematic studies of different types of resource community consumption are lacking. This investigation looks at and compares seven types of consumption and identifies significant consumption indicators linking consumption to broader social phenomena such as the status system in a resource community, social change, satisfaction with work, and resource town living.

While sociologists like Marx, Weber, and Veblen considered consumption a topic worthy of study, relatively little contemporary work has been done on the subject (Segal and Felson, 1972, Foxall, 1974). Differences in consumption are commonly dismissed as the consequence of income differentials. Yet research has shown that though income plays an undeniably important role in consumption, it cannot adequately account for significant amounts of the variation in consumption patterns (Ferber, 1955, Coleman, 1961, Rich and Jain, 1968, Myers et al, 1971, Foxall, 1974, Hebden and

Pickering, 1974, Hisrich and Peters, 1974, Green et al, 1976, Nicosia and Mayer, 1976). The problem is to isolate those variables that can explain significant proportions of the variance in consumption that is not simply a function of income. The elevated incomes in boom-towns and the desire for an improved living standard, together with the belief that consumption is a reward for the perceived sacrifices of living in such isolated communities, result in high levels of consumption. Such settings thus provide an excellent opportunity to study consumption.

This link between consumption and resource town residency is well illustrated in Goldthorpe and Lockwood's (1963,1968,1969) classic study of affluent workers in Luton, England. The authors purposely selected this industrial center for its "newness, instability, and openness, its 'social heterogeneity', its economic climate of expansionism and optimism, and its relative isolation" (Goldthorpe and Lockwood, 1969:33). They concluded that their sample was "consumption-minded" and preoccupied with materialistic aspirations (Goldthorpe and Lockwood, 1969).

The principal data source for this thesis was the 1979 Alberta Oil Sands Environmental Research Program (AOSERP) survey in Fort McMurray, a resource community located 450 kilometers north of Edmonton, Alberta (Gartrell et al, 1980). The parallelism between Goldthorpe and Lockwood's sample and the affluent, economically secure, physically mobile, and consumption motivated population of Fort

McMurray is striking indeed.

Historically, Fort McMurray was established as a fur trading center over 200 years ago. When Great Canadian Oil Sands (later, Suncor) began building their plant in 1963, the town's population of 1200 relied on trapping, timber, and transportation industries for employment. The rapid increase in population associated with the Suncor plant was followed by a second, even larger influx resulting from the construction of the Syncrude facilities during 1973 to 1978. Suncor and Syncrude mine and process the oil sand into synthetic crude.

In 1979, the date the survey was undertaken, the town's population stood at about 27,000. The construction booms of the plant building years had begun to level off and the industrial structure had stabilized somewhat, but construction at the town site itself was still booming. Gartrell et al (1980:154) provide figures demonstrating the change from heavy employment in the transportation, communication, and utilities sector (37 per cent in 1961), through concentration in the construction sector during the construction booms of 1963 to 1968 and 1973 to 1978, to the current concentration in the mining or oil extraction industry (40 per cent of the labor force in 1979). Employment in professional and technical occupations increased from 7 per cent of the labour force in 1961 to 26 per cent by 1979 (Gartrell et al, 1980:157).

The data were collected in May and June of 1979 from 430 adults randomly selected within 430 households. This represents an overall response rate of 69 per cent with 77 per cent of those contacted responding.[1] The sampling design selected dwellings using a fixed interval. Trained interviewers administered the hour long questionnaire which included queries about demographic and other background traits, perceptions of quality of life, aspirations, and socioeconomic position, among other things. The sample was found to be representative by area of town, age, employment sector, and education, although there was a slight bias from the undersampling of males and those who lived in apartments.

The prosperity and employment opportunities in towns like Fort McMurray provide an atmosphere conducive to consumption. These communities are often used as examples of general societal affluence and status leveling. While this study is limited to one time point, some useful conclusions regarding the presence or absence of stratified levels of consumption can still be made.

The next chapter discusses theories and research on consumption. Chapter Three introduces the hypotheses, while the fourth chapter outlines the methodology employed in this

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[1] One incident marred the initial data collection when local social service agency representatives distributed the interview prematurely and without authorization. A spate of negative publicity in the newspaper may have lowered the response rate and biased the results. However, only eleven refusals (8 per cent) were classified as due to the adverse publicity (Gartrell et al, 1980:25).

study, with particular attention to measurement. The results of this research are presented in Chapter Five. Chapter Six, the final chapter, considers the sociological implications of these results and the conclusions that may be drawn from them.

2. Chapter Two: Theories of Consumption and Related Research

2.1 Historical Perspectives on Consumption: An Overview

Karl Marx assigned a key role to consumption and the "fetishism of commodities". A priviledged few owned the means of production and under capitalism, consumption was increasingly concentrated in their possession (Tucker, 1972). For the mass of consumers, Marx argued, consumption was limited by their inability to sell their labour for more than their consumer needs (Freedman, 1961:241). In Marx's typology, necessary consumption needs developed from a historical past and cultural tradition, while luxury needs could be satisfied only by objects "beyond the power of acquisition of the working class" (Heller, 1976:36).

Max Weber considered consumption in the context of status groups. In contrast to Marx's view whereby consumption was founded on class position, Weber postulated status groups stratified by consumption patterns, while class groups differed in their relations to production (Anderson, 1974).

Blumberg outlines this idea clearly:

> While class for Weber was a strictly objective dimension of stratification, status was a subjective dimension roughly equivalent to prestige, honor, or reputation. And, while class was determined by one's role in the market place, status was determined primarily by one's style of life, how one consumed rather than how one produced (Blumberg, 1972:21).

According to Weber, social class is distinguishable from social status and styles of life, and consumption choices

may vary within classes (Weber, 1966).

Preoccupation with material acquisition attracted the attention of another scholar of the period, Thorstein Veblen. The excesses of accumulation he dubbed *conspicuous consumption* and all those who so consumed were labeled members of the leisure class (Veblen, 1966). From Veblen's perspective, the whole purpose of this consumption was emulative display as visible evidence of status position.

Felson (1978) summarizes these relationships between consumption and society:

> Max Weber . . . explicitly distinguished status variables (based upon styles of life) from class variables (based upon market position), while Thorstein Veblen . . . emphasized the role of conspicuous consumption in communicating social standing. Each of these perspectives treats lifestyles in terms of hierarchial social standing (Felson, 1978:49-50).

2.2 Theories of Consumption: Leveling versus Stratification

Proponents of the massification or leveling hypothesis assert that status levels, especially those based on the material display of lifestyles, are becoming increasingly uniform due to the proliferation of cross-societal influences like the mass media and the mass production of consumer goods.

Glenn sums this up in a 1967 article saying:

> one of the more common assertions in the social science literature is that differences in attitudes and behavior among various segments of urban-industrial societies are diminishing, that a process of homogenization, standardization, and 'massification', is leveling differences by region, race, religion, community size, and social level.

> This leveling, it is assumed, results from common stimuli from the mass media, increased travel, high rates of geographic and social mobility, standardization of education, the decline of subsistence agriculture, and similar influences (Glenn, 1967:172).

The same arguments have been refined and elaborated for more direct application to consumer behavior. With widespread prosperity "the possession or use of all sorts of consumer goods has come within the reach of increasingly more people" (Munters, 1977:155). Both the emphasis placed on equality and the increased anonymity of social relations may contribute further to the leveling effect (Munters, 1977). Supporters of this hypothesis believe, remarks Munters, "that it is becoming increasingly difficult to deduce from a person's behavior--or to be more explicit, from the things he buys and from his habits--- his position on the social ladder or to what social level he belongs" (Munters, 1977:155).

The stratification hypothesis represents the opposite pole of the continuum. It asserts that the status behavior and material symbolism associated with varying levels of prestige is not disappearing, but merely reappearing in new guises.

Munters states this clearly when he says:

> For as soon as it is realized in the higher social levels that elements of the life-style which have originated in this circle are finding their way to a lower social stratum, efforts will be made to again increase the lessened distance to that lower social level, for example, by looking for new elements or new combinations of elements, which are then integrated into the subculture of the upper class (Munters, 1977:156).

While research on both sides of the issue (Munters, 1977, Felson, 1976,1978) has produced equivocal results, it serves to focus attention upon the potential disjunction that can, and often does exist between material lifestyles and prestige hierarchies. The increased affluence and resulting profusion of material goods has given the average consumer a wide range of stylistic choices, and made analysis of consumption patterns increasingly difficult.

If a strong leveling process were at work over time one might expect to observe relatively little variation in consumption with such a largely working and middle class community as Fort McMurray. It can be argued that a boom-town like this should be at the forefront of any leveling, particularly given the relative absence of the poor (and unemployed) and the corporate elite. While differences in consumption might be associated with differences in needs (perhaps represented by life cycle differences), or the length of time spent in the community, the leveling hypothesis would seem to suggest that differences in consumption would generally not be a function of either class or status differences, even in a cross-sectional sample of the community generated at one point in time. The stratification hypothesis would predict just the opposite.

2.3 Determinants of Consumption by Type

2.3.1 Household Level of Living

One approach to studying consumption lumps all types of consumption together and labels this "level of living". Quantitative level of living scales emphasize the quantity owned or the amount consumed over a few selected products, while lifestyle research focuses on the qualitative variations in favored activities and purchases between families.

Zablocki and Kanter (1976) equate levels of living with diverse life styles. Their economically based typology identifies three levels of living: property dominated life styles, occupation dominated life styles, and income or poverty dominated life styles (Zablocki and Kanter, 1976:272). Since these categories are analogous to the upper (elite), middle (labour-controller or labour-controlled), and lower (poorly paid, unemployed, *et cetera*) class designations of social class theorists, the vast majority of households would in Fort McMurray fall under the middle class, occupation dominated rubric. Variations in life style among occupation dominated persons are accounted for by:

> "differences in work situations: the opportunities and world views offered by different relations to the means of production, the time constraints and pressures of work, the spillover of work demands into private life, and the consumption levels made possible by the income generated by a job" (Zablocki and Kanter, 1976:274, Wright and Perrone, 1977).

Thus key variables for predicting level of living would

appear to be income, occupation, and perhaps class.

Based on data collected for the Boston Social Standards Survey, Rainwater (1974) concluded that "there is a significant interaction between living level and family size, and so dollar increments for addition to family size are greater the higher the level" (Rainwater, 1974:101). Two other factors found to be important in levels of living were per capita disposable income, and community size. Rainwater writes that the "amount thought necessary to get along in a given community will be a function of per capita personal income as modified by local standards, which vary as a one twentieth power of community population" (Rainwater, 1974:57).

In the context of this thesis, the nature of the community is "held constant", although it is still expected to play an important role in levels of living. Fort McMurray is a single industry town, heavily dependent upon its oil resources. Forcese (1975) offers a general profile of such communities:

> single-enterprise towns are not impoverished; they enjoy a precarious prosperity. They are primary or extractive industry towns, and unlike the value-added industries of urban centres, exist so long as there is a profitable volume of extraction. As long as the mine or forest holds up, or the company does not need to retool for continued resource exploitation, there may be a 'good living' for the Canadians employed as workers in these towns, and for those few merchants and professionals who serve them (Forcese, 1975:29).

The economic opportunities available in these communities attract a younger, more mobile population ready to take

advantage of the higher wages offered and improve their status (Forcese, 1975, Krahn and Gartrell, 1983).

Surprisingly little concrete evidence is available on consumption in single industry towns. Several writers mention "conspicuous consumption" found hand in hand with high wages (Riffel, 1975, Van Dyke and Loberg, 1978). It is suggested that relatively more debts are incurred by resource community residents, in conjunction with their presumably more flagrant spending habits (Goldthorpe and Lockwood, 1969, Van Dyke and Loberg, 1978). Residents of Luton, England, a community with resource town characteristics, were found to own relatively large numbers of consumer items, in keeping with their expressed consumption aspirations (Goldthorpe and Lockwood, 1969).

What then, are the implications for consumption in such communities? If indeed the primary motivation behind migration to resource towns is a desire to improve one's level of living, those who have stayed longer in the community should exhibit a higher level of living. The generally higher average incomes of resource community residents provide the means to consume relatively freely (Gartrell et al, 1980).

With regard to occupation, a pertinent distinction is that between core employees and peripheral sector employees. Those who work in the core (oil) sector are differentially rewarded relative to those employed elsewhere. Certain fringe benefits and incentives are part of the industry's

employment package. Levels of living among oil employees may well be higher than for the rest of the populace, solely due to their sector of employment.

One last characteristic of resource town populations deserves mention. Very often it is a self-selective group of people who move to such communities and younger, highly skilled, and educated persons tend to predominate (Krahn and Gartrell, 1983). Consequently, human capital (education, experience, *et cetera*) and the distribution of households in life cycle stages are not typical of the general population and are perhaps less likely to offer a good explanation of consumption.

Looking only at overall levels of living, while valuable, is not enough to fully characterize consumer behavior. Several researchers have concluded that sociological variables may have different effects depending on the category of consumer goods and services under study (Myers, Stanton, and Haug, 1971, Myers and Mount, 1973, Schaninger, 1981). For this reason it is probably worthwhile to separately examine different types of consumption.

2.3.2 Vehicles

Particularly in North American society, vehicles form an important category of consumption. Figures indicate that in 1974 76.9 per cent of Canadian households had one or more more automobiles, while 20.5 per cent reported owning two or more (*Perspectives Canada III*, 1980). Evidence from the

literature indicates that income and status are the two most salient variables in studies of vehicle purchases. However, these relationships are not simple.

In his 1961 study of vehicle consumption Coleman (1961) found that controlling for income enhanced the prediction power of his status (Warner, 1949) variable. Peters (1970) used relative occupational class income to encompass the interactions between status and income and concluded, like Coleman (1961), that vehicle consumption could best be understood as a function of occupational status when income was controlled (Peters, 1970).

More recently, Schaninger (1981) reports that income controlling for social class or status correlates highly with the number of vehicles owned (Schaninger, 1981:203). "Within each social class the top income quartile households own more cars than households in other quartiles" (Schaninger, 1981:203).

There is, however, one important restraint on research into vehicle consumption. Several writers have pointed out that vehicle ownership in society generally is a high priority across a wide range of status, income, and age groups (McFall, 1969, Hebden and Pickering, 1974, Kasulis et al, 1979). In particular, Hobart et al note that Fort McMurray "has a high per capita use of automobiles" (Hobart et al, 1978:16). Unless one distinguishes "how much" ownership of what types of vehicles, and specific factors such as vehicle condition, class and status may show only a

relationship to automobile ownership because of the ubiquity of the car in everyday life. Perhaps for these reasons vehicle consumption has not figured as prominently in the literature as has the consumption of other durables.[2]

2.3.3 Durables

The concept of a durable good implies a permanence beyond day to day consumption. Food and alcoholic beverages fall into the non-durable category while appliances and televisions are considered to be durables. The social class variable followed Wright and Perrone's (1977) class divisons based on job autonomy and responsibility criteria, (a labour-controller or labour-controlled classification).

Consumer researchers have focused a great deal of attention on the search for whether social class or income is the better predictor of consumption.

Coleman's (1961) study concluding that the consumption of durables like furniture was less a function of income than of status, may be questioned on the grounds that his status measure already incorporated "source of income" as well as occupation and housing type. Indeed, Myers and Mount's (1973) investigation found that income, not status, offered the best explanation for the possession of durables, given that their status measure (labeled "social class") excluded an income term.

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[2]Vehicles may be considered a category of durables.

Schaninger (1981) argues that the real issue is not whether status group membership or income correlate most highly with consumption, but what product or service use each predicts better. Items representing a more substantial dollar investment, like large appliances, are best explained by income. Other possessions with relatively overt symbolic and status conveying connotations, such as clothing, cars, and televisions are more accurately predicted by a combined income/status variable than by either variable alone (Schaninger, 1981:207).

From this evidence, income, occupational status, and perhaps education might be expected to contribute to the explanation of durable consumption. It would be premature to assume, however, that these factors are the only determinants of consumption.

At the begining of the adult life cycle young singles have few assets and few commitments on their income (Lansing and Morgan, 1955, Mayhew, 1973, Stampfl, 1978). Preoccupation with recreation and leisure activities is characteristic of this stage (Stampfl, 1978) and the limited durable purchases by this group are concentrated on items like cars, televisions, and stereo equipment (Lansing and Morgan, 1955, Hebden and Pickering, 1974, Stampfl, 1978).

Typically this phase is followed by the "young, married and childless" stage. These households are heavy consumers as they are more likely to have two incomes and are in the initial stages of setting up a home (Lansing and Morgan,

1955). Accordingly, the purchase of durables is a major priority for this group (Lansing and Morgan, 1955, Stampfl, 1978), while leisure activities are expected to be a lower priority.

With the birth of the first child the consumption pattern alters. Pressures are greatest at this point since the income must now serve the needs of more people (Mayhew, 1973). Desires for home ownership are strengthened, putting further strain on the budget at a time when the wife's income is often lost to the demands of childcare (Doling, 1976, Stampfl, 1978). Lack of income constrains expenditures and the correlation with durable ownership is predicted to be considerably weaker than for the previous stage. As the children grow older and family income increases, the financial strains are lessened. Again, durables connected with the dwelling unit predominate and some replacement of goods may be taking place (Lansing and Morgan, 1955). Stampfl (1978) speculates that this group may be the most likely candidates for boat and recreational vehicle expenditures, but he does not offer any empirical support to substantiate this.

In later stages of the life cycle, consumption levels off and then declines due to decreased incomes and different desires, among other things. These may lead to increased consumption of health care, drugs, and similar items. Consumption in this life cycle phase cannot be empirically examined in the context of this thesis because of the small

number of persons over 45 (11.7 per cent) in the Fort McMurray sample (Hobart et al, 1979, Gartrell et al, 1980). The relative youthfulness of the population is a resource community trait. In Fort McMurray durable consumption would be expected to be a linear function of life cycle stage, although accumulation might be expected to decrease somewhat at later stages.

Another factor in consumption is the participation of women in the labour force. Strober and Weinberg (1980) found that women of similar income levels and life cycle stage neither purchased or owned significantly different quantities of labour-saving durables such as microwave ovens and dishwashers. Once family income is taken into account, female labour force participation does not appear to be a useful predictor of durable consumption (Strober and Weinberg, 1977,1980).

Summarizing this discussion, previous research has found that family or household income, occupational status, and stage in the family life cycle influence durable consumption. Related variables such as age and education might also play a role.[3]

The literature does not cover one other variable that could prove interesting in explanations of durable consumption and that is length of residence in the

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[3]For example, Carman's (1965) social class measure takes into account age and level of education. Since this status scale is predicted to explain durable consumption, some relationship could exist with education and age alone. On the other hand, controlling for occupational status will probably weaken the correlation with income.

community. If resource community residents migrate to raise their level of consumption, staying longer may increase the number of durables owned. The work of Goldthorpe and Lockwood (1969:39) offers empirical support for this hypothesis.

2.3.4 Financial Investments

Compared to the purchase of durables, investment items are less present oriented, less tangible, and often represent a more substantial monetary outlay. For many consumers, investment is linked to security concerns and a futuristic perspective. Savings, homes, and pension plans, are all "goods" that one may choose to spend money on, that is, consume. Dollars currently invested in items like these represent not only immediate consumption, but also the possibility of future increments of consumption. Where these assets accrue additional value, the potential income, often in the guise of capital gains, can exert a substantial influence on consumption patterns (Henretta and Campbell, 1978:1208). For example, Goldthorpe and Lockwood noted that "57 per cent of the affluent workers" and "69 per cent of the white collar sample owned or were buying their present homes" (Golthorpe and Lockwood, 1969:39). Owning a home was also a frequently mentioned aspiration of Goldthorpe and Lockwood's sample (Goldthorpe and Lockwood, 1969:77).

In a cross-national study Katona et al (1971) linked age with savings behavior observing that "financial saving

occurs primarily in the middle years of life when income is typically the highest and when concern with retirement has become salient" (Katona et al, 1971:103). Life cycle enters the picture as an important predictor here also. Katona et al (1971) remark that "the relative strength of motives to spend and to save differs in different age groups: for younger people the desire to improve their standard of living, and for older people the desire to acquire reserve funds, was found to be more powerful" (Katona et al, 1971:101). The findings of Doling (1976) in his study of housing choice and the family life cycle are compatible with these observations with respect to both age and family life cycle. Given the relative youthfulness of the resource town's population, motivations to spend can be expected to outweigh motivations to save. Younger persons may therefore score lower on the investments scale of consumption than older persons. Occupation and income also played a key role in savings behavior according to Katona et al (1971:103).

When Henretta and Campbell (1978) evaluated the effect of different variables on various investment measures, they found income to be a critical factor. Controlling for earnings, the divorced and unmarried had fewer financial investments than did their married counterparts. An increase in household size decreased investments on a per person basis while education was found to have a "large and positive" influence (Campbell and Henretta, 1980:627). Age also showed a positive correlation with some investments,

but a negative one with others. Finally, all investment measures correlated significantly and positively with occupational status (Henretta and Campbell, 1978).

To conclude, several variables appear to be useful in predicting consumption of investment and financial items. Income is expected to be important and occupational status may prove a strong factor, since it represents earning power and attitudes toward the future and security. The effect of education on investments may be weak after controls for related variables like income and occupational status are introduced, particularly when education is likely to vary relatively little within the Fort McMurray sample.

Life cycle stage and age should be good predictors of investments, with accumulated assets increasing as one becomes older. However, the demographic profile of Fort McMurray does not lend itself readily to this type of examination because the populace is concentrated in the younger age groups. Likewise, married persons should have amassed greater quantities of investment goods, compared to single people, although household size and financial investments may be negatively correlated.

One other type of consumption was combined with the measures of vehicle, durable, and investment possessions to form a household level of living index. A leisure scale was created to tap this more "present oriented" type of consumption.

2.3.5 Leisure

Entertainment and recreation were found to be prime concerns of Fort McMurray residents (Hobart et al, 1979). Since leisure consumption does not result in possession or ownership of some concrete item, this aspect of consumption is often omitted in studies of durable goods. Leisure is an activity-directed mode of consumption that includes vacations, participation in group activities, hobbies, or spending money on food and entertainment. The leisure scale used for this study is composed mainly of activities where some monetary expenditure is implied, such as the frequency of eating out or attending movies.[4]

The literature on leisure consumption is limited, however life cycle offers a simple explanation of leisure consumption. Young, single persons (and perhaps childless couples) are acknowledged spenders on recreation, entertainment, and vacations (Stampfl, 1978). Fluctuations in leisure preferences between other stages in the life cycle appear to be indistinguishable (Lansing and Morgan, 1955, Mayhew, 1973, Murphy and Staples, 1979, Stampfl, 1978). Thus marital status may be a good predictor of leisure consumption. One can speculate that younger persons have fewer obligations and may be more inclined to indulge themselves in this form of consumption than older persons.

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[4]The reader is referred to Appendix A and to the methodology section of this thesis for a more detailed discussion of this scale.

To complete this study, two more dependent variables were introduced that offer a different perspective on consumption. These are credit card use and debt.

2.3.6 Credit Card Use

A series of articles by Slocum and Mathews linking income and status to credit card behavior uncovered two patterns of credit card use (Mathews and Slocum, 1969, Slocum and Mathews, 1970, Mathews and Slocum, 1972). According to the authors, "members of the lower social classes tend to use their cards for installment purposes; upper classes for convenience" (Mathews and Slocum, 1969:78). While Mathews and Slocum (1969) attribute this result to the dissimilar values held by these status classes, it is equally possible that the poorer people have to use cards in this manner because of their low disposable income and their difficulty in obtaining credit. Since social class was measured with Hollingshead's occupation and education criteria, these two variables, occupation and education, should correlate positively with credit card use (Hollingshead and Redlich, 1958).

Plummer's (1971) study of bank credit card use and life style presented a profile of the most frequent users of credit as "higher income, better educated, middle-aged, and professional segments" who engaged in "an active upper socioeconomic, urban-suburban life style with many interests outside the home" (Plummer, 1971:41). Credit card use was

perceived as a convenient and modern purchasing method, not a way to finance unaffordable items. This implies that while income may contribute to credit card use, it will not be as good a predictor as, for example, occupational status. Judging from Plummer's (1971) comments, a social class variable based on a division between managers and similar professionals (labour-controllers) versus other occupational groups might also be a factor in credit card use. Segal and Felson (1972) sum it up succinctly when they say "the important distinction is that between people who can mobilize resources in our credit market and those who cannot" (Segal and Felson, 1972:150).

One other variable may prove useful in explaining credit card use. Several studies mention the "life cycle squeeze" experienced by couples with young children whose incomes are suddenly inadequate to their new situation (Lansing and Morgan, 1955, Murphy and Staples, 1979). Credit card use may be a compensatory device used by such families.

2.3.7 Debt

In the Fort McMurray survey debt was measured as the dollar value of a household's current debt excluding any mortgage debt on a residence.[5] Income seems an obvious factor in assessing debt. Canadian statistics show an

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[5] Katona et al (1971) offer a justification for excluding mortgage debt commenting that repayment is really a form of saving, a building up of home equity. The unit of measurement for the debt variable in this research was hundreds of dollars.

increase in debt as family income increases (Brown, 1981:9). However, as income usually increases with age (until about 50 plus years), the important issue is debt given income (Brown, 1981). Henretta and Campbell (1978) and Katona et al (1971) suggest that young people at the start of a career may use debt as a way of consuming beyond their current income in the belief that their income will later catch up to their demands. This might prove to be the case in resource communities like Fort McMurray, where economic betterment is a prime motivator for in-migration and where the youthfulness of the population might encourage this kind of thinking. Following this logic, income, occupational status, and age, should be significant predictors of debt.

Brown's (1981:9) work on debt over the life cycle, as measured by age of the family head, showed debt to be highest among the middle-aged (34 to 44 years of age), at all income levels.[6] Given the attenuation of the Fort McMurray age distribution, age may bear a roughly linear relationship to debt. One complicating factor here is housing debt, an "investment" debt. This type of investment might increase other indebtedness in two ways: by related purchases such as furniture, or unrelated purchases that must be financed, because there are now no savings to buy items, like cars, outright.[7]

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[6]Figure source is Statistics Canada, 1980, *Incomes, Assets, and Indebtedness of Families in Canada, 1977*. Cat. no. 13-572. Ottawa: Minister of Supply and Services.

[7]Controlling mortgage size or payments does not solve this difficulty since the payments build equity, that is, increase investment assets, because renters also make

Consideration should also be given to the somewhat unique situation of the resource town. The emphasis placed on consumption by migrants to such communities could conceivably precipitate a consumption/debt cycle where the need to consume expands beyond the available income. The only way out of debt is then to stay and continue to work for the higher wages offered there, an entrappment syndrome (Gartrell et al, 1980). If this is the case there should be a significant difference in debt by length of residence in Fort McMurray.

'(cont'd) payments, and because of intervening factors like housing subsidies. Mortgage size is also a function of income, age, and stage in the life cycle. Furthermore, the variance in mortgage size is affected by the nature of resource communities. That is, most persons are living in relatively newly built housing and can be expected to need financing.

3. Chapter Three: Hypotheses

The hypotheses are statements of the relationships between the independent variables and consumption in general. When a variable is expected to affect particular types of consumption this is noted in the paragraph directly following the individual hypotheses. In this study the unit of analysis is the household and no attempt is made to separate the consumption of individual members. While all hypotheses refer only to binary associations, effects are expected to be net of the influence of all other predictors. As discussed in Chapter Four, this is most unlikely where the predictors are strongly correlated.

Hypothesis One: *The high incomes of resource community residents result in high levels of consumption with the highest consumption levels associated with the highest income earners.* This is perhaps the most well-known hypothesis, since income increases consumer choice. However, the amount of variance explained by income is expected to vary by consumption type.

Income should correlate with vehicle and durable consumption, and is expected to have a strong correlation with investments. The composite index of total household consumption should also correlate significantly with income. Similarly, income should explain significant amounts of the variation in credit card use and in debt. As noted in Chapter Two, income is an unlikely predictor of leisure

consumption.

Hypothesis Two: *Persons accorded higher occupational status will consume at correspondingly higher levels.* Occupational status is predicted to correlate significantly and positively with the consumption of vehicles, durables, and investments, and with overall level of living, credit card use, and debt. These predictors parallel those for income.

Hypothesis Three: *The managerial/professional class of labour-controllers will engage in more consumption than the labour-controlled class.* This social class variable is expected to correlate significantly with general consumption. The literature does not yield any reason to suspect this correlation would hold true for any other type of consumption with perhaps the exception of credit card use and investments.[8] Credit card use is often associated with social class in the literature, but the class typology employed here differs from that in most consumption research.

Hypothesis Four: *The advantages of core (oil) sector employment in Fort McMurray mean that these employees will*

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[8]The suggestion is sometimes made that members of the managerial/professional class emphasize investment consumption at the expense of more visible types of "conspicuous consumption", however, evidence to support this point is lacking.

have higher levels of consumption than their less advantaged peripheral sector counterparts. The benefits and bonuses provided by the oil companies may add substantially to a household's consumption level. This hypothesis is more applicable to overall consumption levels than to particular types of consumption. The relationship is likely to have significance only when all types of consumption are considered together.

Hypothesis Five: *Better educated residents will consume at higher levels than the less educated.* Education is believed to have a positive effect on consumption, but evidence from the literature indicates that this may be only at the zero-order correlation level. Controlling for income and occupation using multivariate analysis techniques may show little independent effect of education. The only type of consumption where education is expected to have value as a predictor is credit card use.

Indeed, since the first five hypotheses all deal generally with stratification variables, the expected correlation between these independent variables will likely result in reduced effects for some in multivariate analysis. This is particularly true for occupational prestige and class, because the latter is based upon an occupational division and is only a binary variable. The next six hypotheses are concerned with demographic variables.

Hypothesis Six: *Given the truncated age structure of Fort McMurray, the effect of ageing on consumption will be positive with older cohorts consuming at higher levels than younger ones.* The relationship between age and consumption appears more complex. Consumption increases through middle age, levels, and then declines just before or after retirement. However, since the Fort McMurray sample has few older persons (those over 65 years of age) this leveling and eventual decline is unlikely to be observed. Age is therefore expected to be positively related to durables, financial investments, overall level of living, and debt, while the correlation with leisure is predicted to be negative. That is, younger persons will be the highest consumers of leisure.

Hypothesis Seven: *Consumption will vary with position in the life cycle, but will generally increase as the family progresses through the life cycle.* Life cycle stage is a predictor that varies by consumption type and does not lend itself well to generalizations. For example, consumption is expected to increase as the life cycle progresses until the "empty nest" and retirement stages, when it is expected to level and then decline. This would suggest that the relationship between consumption and life cycle in the Fort McMurray sample would be positive, and that the leveling and declining pattern would not be evident. Significant correlations are therefore predicted between stage in the

life cycle and durable consumption, investment consumption, overall level of living, and credit card use.

Young and single persons should be the heaviest consumers of leisure and a correlation might therefore be expected between this dependent variable and the single and childless stage of the life cycle. Controlling for age, marital status may be a good approximation for this stage of the life cycle. In view of this, stage in the life cycle may not enter the same regression equations as marital status, particularly in the case of the leisure index.

Hypothesis Eight: *Married persons will consume differently and at different levels than single persons, depending on the type of consumption under consideration.* Married persons, compared to singles (including the divorced, separated, and widowed) will consume more durables, have more financial investments, use credit cards more, and have somewhat more debt. Singles, as opposed to marrieds, will engage in more leisure oriented consumption, thus a significant negative correlation is predicted with this index.

Hypothesis Nine: *Level of consumption is directly related to household size, but the direction of this relationship is dependent upon the type of consumption, given that resources are limited and priorities have to be chosen.* Household size should predict durable and investment

consumption, as well as overall level of living. The relationship with the durables and household level of living scales is expected to be positive while that with the investments index should be negative. The larger the size of the household, the fewer investment items it is predicted to possess. The compromise between future versus present consumption is expected to result in a low level of investment consumption for households with more persons. Consumption to satisfy more immediate needs is likely to be emphasized at the expense of investments.

Hypothesis Ten: *Where there are more employed persons living together in a household consumption levels are expected to be higher.* The number of persons employed in a household is a variable that acts in roughly the same manner as total household size. This variable was designed mainly to separate those households where several persons, especially single or unrelated persons, are living together and pooling their resources for items like rent. Three singles residing together and sharing the common living expenses such as rent and utilities will have available considerably more discretionary income for consumption purposes than a family with a sole breadwinner. Number of employed persons in the household is predicted to correlate best with total consumption rather than with any particular type.

Hypothesis Eleven: *Persons who have stayed longer in Fort McMurray (and worked longer at resource town wages) will have higher levels of consumption than more recent migrants.* Like sector of employment, length of stay in the community is another resource town factor likely to influence consumption. People migrating to such communities anticipate an increase in their annual earnings and a commensurate increase in their level of living. The newest migrants have had less time to make more money and less time to have spent these funds than those who have lived in the town longer. Length of stay should explain significant amounts of the variance in durable consumption, in overall consumption, and in debt. Durable consumption may be a major goal of resource town dwellers (Goldthorpe and Lockwood, 1969). Debt is postulated to accumulate over time among resource town residents partially because of high consumption expectations, and partially because the high wages in these communities are seen as a way to carry more debt (Goldthorpe and Lockwood, 1969, Gartrell et al, 1980). Consumption may also be a "reward" for staying longer and "depriving" oneself of urban life.

4. Chapter Four: Methodology

4.1 Measurement of Consumption

Seven different measures were composed to represent a variety of consumption patterns. Each index will be discussed below from the point of view of its rationale or composition, but the reader is referred to Appendix A for a complete list of the individual items in each scale. Table One presents the mean, standard deviation, and N for each of the variables in the study.

4.1.1 The Vehicles Index of Consumption

The vehicles scale measures ownership of a variety of transport and recreational vehicles including: cars, trucks, vans, jeeps, motor cycles, truck campers, camper-vans, camper trailers, mobile homes, boats with and without motors, and snowmobiles. The total number of vehicles possessed was calculated from responses to the question; "How many of the following vehicles do you have?".' The mean number of vehicles owned is 2.33 with a standard deviation of 1.88.

4.1.2 The Durables Index of Consumption

'In this thesis to "have" is interpretated as possession of an item and the term "ownership" is used loosely as a synonym for possession in this sense.

Table One: Means and Standard Deviations

Variable	Mean	Std Dev	N
1. Vehicles	2.333	1.880	423
2. Durables	5.864	3.256	428
3. Investments	2.789	1.789	398
4. Leisure	-0.041	2.883	405
5. Household Level of Living	10.992	5.993	368
6. Credit Card Use	2.317	1.287	429
7. Debt	39.252	62.065	347
8. Household Income	24709	15223	349
9. Occupational Status	48.468	13.244	425
10. Social Class	0.300	0.459	430
11. Sector of Employment	0.463	0.499	430
12. Level of Education	12.176	2.898	427
13. Respondent's Age	31.563	9.727	426
14. Stage in the Life Cycle	2.842	1.170	430
15. Marital Status	0.754	0.432	430
16. Household Size	3.481	1.618	430
17. Number of Employed Persons in the Household	1.577	0.854	430
18. Length of Stay in the Community	3.194	3.854	418

Like the vehicles scale, the durables index is a numerical measure of ownership or possession, this time of goods such as: dishwashers, microwave ovens, automatic washers and dryers, freezers, food-processors, gas barbeques, garborators, stereos, pool tables, bicycles, skis, golf clubs, and guns. In the case of bicycles respondents were asked for the number of bicycles, if any, they possessed. The average number of durables owned was 5.86 with a standard deviation of 3.26.

4.1.3 The Investments Index of Consumption

Examples of investment assets grouped under this index are: second homes or cottages, other property, shares or stocks, bonds, and retirement, home ownership, and insurance plans. In addition, the fact that one's house often represents a substantial monetary investment with the possibility for capital appreciation is taken into account. Respondents who owned or were lease-purchasing their home were given a score of one, renters zero. If this home ownership was not subsidized by the employer an additional score of one was assigned to that respondent's total. A third possible point was given to home owners if their house was classified as a single detached dwelling. The mean number of investments per household was 2.79 with a standard deviation of 1.79.

4.1.4 The Leisure Index of Consumption

Some persons may prefer a more fleeting form of material consumption by eating out in restaurants, going to bars or lounges, attending movies, or similar activities. Respondents were questioned about the frequency with which they had engaged in one of the following activities in the last month: attended a movie, went to a bar, a lounge, or a restaurant, entertained at home, or attended cultural events. An inquiry was also made regarding the number of days spent away from Fort McMurray in the last year, a measure of vacation time concentrating on trips that presumably would involve greater spending than would staying in Fort McMurray.

The different measurement units of various indicators made it necessary to standardize the leisure scale. The standard score was calculated by subtracting the mean score for each variable in the scale from the raw scores for that same variable and summing the results (Kerlinger and Pedhazur, 1973:24). As expected, this standardization procedure resulted in a mean value of consumption of approximately zero, while the standard deviation was 2.88.

4.1.5 The Household Level of Living Index

Four scales of consumption were summed to produce an overall level of living index: the vehicles scale, the durables scale, the investments scale, and the leisure

scale. Thus each household was assigned a numerical value for total consumption based on its consumption over these four areas. The mean value of the overall level of living index was 10.99 and the standard deviation was 5.99.

4.1.6 Credit Card Use and Debt

Consumption of credit was limited in this study to the frequency with which a respondent reported using credit cards. Asked how often they used credit cards on a scale from one (never), to five (very often), the average Fort McMurray household scored 2.32 with a standard deviation of 1.29.

Respondents were asked to estimate the dollar value of their total debt (excluding mortgages). Debt was recorded in hundred's of dollars. From this method of measurement it was determined that the mean debt of households in Fort McMurray was 3,925 dollars with a large standard deviation of 6,206 dollars. After removing two extreme values, debt ranged from zero for 108 debt free households to a high of 50,000 dollars.

4.2 Measurement: Predictors of Consumption Differences

4.2.1 Income

Income is perhaps the most important indicator of consumption levels. Without controlling income, it would be

difficult to judge the explanatory power of other variables. Income is a sensitive issue, and in Gartrell et al's (1980) Fort McMurray survey precautions were taken to ensure privacy for the respondent while minimizing the missing data on this traditionally low response variable.

The income variable utilized here was total household income. This represented the sum of all sources of income for that household in 1978 mentioned by the respondent.[10] The upper limit of the income variable was recorded as 82,238 dollars with a mean of 24,708 and a standard deviation of 15,222.

4.2.2 Occupational Status

A great deal of confusion surrounds the use of status and social class in consumption research. Status is not social class, even though some facets of social class figure prominently in status determination. However, status also takes into account the esteem others accord to that rank. Those of the same class are not necessarily equivalent in status.

Commonly, as Wright and Perrone (1977) point out, occupational status is used to delimit classes or status groupings. Occupational status has found particular favor with marketing researchers who frequently measure social

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[10]Included here were the wages or salary of the respondent and if relevant their spouse, the wages or salaries of other household members (before deductions in each case), and the net income of all household members from self-employment, government transfer payments, or other similar sources.

class by occupation or occupational prestige. Occupational status (prestige) was chosen as the most relevant indicator because it is easily operationalized in the Canadian context using Blishen scores,

> The socio-economic index used to measure occupational status in this study was developed by Blishen and McRoberts (1976). They assigned socio-economic scores ranging from a low of approximately 19 (occupations such as hunting and trapping) to a high of around 75 (occupations such as dentistry and law), to the 486 different occupations identified in the *Canadian Classification and Dictionary of Occupations* (1971). These scores were based on three components: the average income and education of individuals in these occupations in Canada (from the 1971 census), and the prestige rankings of these occupations (from Pineo and Porter, 1967) (Gartrell et al, 1980:171).

For the present analysis a slight modification was made to accomodate the household as the unit of comparison. In cases where the respondent was married and both spouses were employed the household was assigned the higher of two Blishen scores; either the respondent's or the respondent's spouse. This acknowledges those cases where the husband and wife have differing occupational statuses and recognizes the contribution of the wife's job to the household status (Haug, 1973). Where the respondent was married, but was not employed, the household Blishen score was equivalent to the spouse's own score. Otherwise the respondent's occupational prestige rating was used. All Blishen scores for respondents or their spouses were derived from their present or last full-time job. Based on these coding criteria, the mean value for occupational status was 48.47 with a standard deviation of 13.24, similar to Canada as a whole (Krahn and

Gartrell, 1983).

4.2.3 Social Class

Social class is one of the most controversial concepts in consumption studies and may have distinctly different connotations, even for sociologists, due to a colloquial looseness in the use of the term. In its traditional form social class implies Marxian class categories defined by a relationship to the means of production. If "Marxian class categories have been almost totally ignored in systematic quantitative studies of social stratification and income inequality", they have been ignored even more thoroughly in most consumption research (Wright and Perrone, 1977:32). Variables presumed to correlate with social class, like income, occupation, education, or even housing, are utilized as surrogate measures of class when each of these variables is best treated separately.

Fort McMurray's class structure is truncated by the absence of many of those who make decisions affecting the community. Capitalists, grande or petite, are too few in number to be treated as separate classes, as are natives and the poor.'' Given such conditions, class in this study will be handled in the manner suggested by Wright and Perrone (1977) and Beck et al (1978). Wright and Perrone's work

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'' Self-employed persons and those employed in family businesses or farms comprised 5.4 per cent (N=23) of the sample, while 4.0 per cent (N=16) were native and 5.5 per cent (N=24) were unemployed.

(1977) proposes a division based on relationships to labour. Whether a person controls his labour or has his labour controlled is the distinguishing criteria of "managers" and "workers".

This approach is reinforced by Jackman's (1979) study in which she concludes:

> The way Americans associate occupations with classes suggests that they are more sensitive to socioeconomic hierarchies based on occupational prestige, education, skill, income, job authority, and task discretion than they are to the blue collar/white collar dichotomy (Jackman, 1979:460).

Following these conceptualizations, a dichotomous household class variable was created in an analogous manner to occupational status. Each respondent and if applicable, their spouse, was assigned a four digit occupational class code from the *Canadian Classification and Dictionary of Occupations Manual, Volume Two* (1971) based on the nature of their present or last full-time job. Households where either the respondent or their spouse were classified as managerial, administrative, professional, or technical workers (codes between 1111 and 4111) received a score of one while those households that did not meet this criteria were assigned a class score of zero. Class becomes, therefore, a binary variable with two categories: labour-controllers (managerial, professional, or technical) and labour-controlled workers (all others). Household class had a mean of 0.300 and a standard deviation of 0.459 with 129 persons (30.0 per cent) falling into the labour-controller class.

4.2.4 Sector of Employment

Beck et al's (1978) analysis of income level variance among core and periphery sector workers pinpointed a distinction particularly important in resource towns.'[2] According to these authors, both workers and employers in the peripheral sector are disadvantaged, materially and otherwise, relative to their core counterparts. (See also, Krahn and Gartrell, 1983).

Since the oil industry falls into the core sector this is an extremely useful concept for segmenting the Fort McMurray population. To use households as the measurement unit, households where either the respondent or their spouse worked for the oil companies were assigned to the core sector (coded as one), while those households with no oil company employees were counted as part of the peripheral sector (coded as zero). The percentage of households with core sector workers was 46.3.

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[12]The characteristics of peripheral sector industries are "small firm size, seasonal and other variations in product supply and demand, labor intensity, weak unionization, and low assets". They include agriculture, some manufacturing, retail trade, business and repair, and personal and entertainment services (Beck et al, 1978:709). Core sector industries "exhibit high levels of capital intensity, unionization, large assets, high profit margins, product diversification, and market concentration". Examples are: mining, construction, manufacturing, transportation, communications, utilities, wholesale trade, finance, professional services, and public administration" (Beck et al, 1978:709).

4.2.5 Level of Education

Education was measured as the number of years of education completed by the respondent. The average respondent had a high 12.18 years of education and the standard deviation from this was small (2.90 years). Income, occupational status, social class, sector of employment, and level of education may be generally classified as stratification variables. Demographic indicators of resource town consumption are considered next.

4.2.6 Age, Life Cycle Stage, and Marital Status

Fort McMurray respondents are young with a mean age of 31.6 years for the adults (over 16) in the sample, and a standard deviation of 9.73. Fully 90.0 per cent of the respondents were under 45. Like education, age varied less than it does in the general population and consumption patterns cannot be easily examined for older cohorts.

Marital status is an important variable in the consumption literature, especially with respect to leisure. The unmarried or single category of this dichotomous variable (coded zero) included those widowed, divorced, or separated, as well as those never married. Respondents were classified as married (coded one) if they were either legally married or living common-law. Of the total sample, 324 or 75.4 per cent were "married".

Marital status and the presence and age of children were the criteria for classifying households into life cycle stages. The bachelor or single stage included those who were currently unmarried and had no children. In the Fort McMurray sample, 76 persons (17.7 per cent) fit this classification. The 75 married and childless persons (17.4 per cent) were coded stage two, and stage three was defined to include the 150 (34.9 per cent) married persons with at least one preschool child. Those married persons with older children, that is, all children at least six, constituted the fourth and "oldest" stage. This group was comprised of 99 people or 23.0 per cent of those sampled. Further segmentation into categories like "retired" or "empty nest stage" was precluded by the small number of cases. A fifth stage was created to accomodate an increasingly visible group, single parents. In total, 30 people (7.0 per cent) were classified as unmarried with children, that is, single parents.

Obviously these stages are not assumed to be a linear progression. In the regression analysis these life cycle stages were entered as binary variables coded as zero and one.

4.2.7 Household Size

Measured as the total number of persons in the household, related or not, this variable's mean value was 3.48 and the standard deviation was 1.68. While household

size ranged from one to ten, less than 10.0 per cent of the households had more than five members. Persons living alone constituted 9.8 per cent of all households surveyed.

4.2.8 Number of Employed Persons in the Household

Household size is not a variable that distinguishes between families living together as a unit and unrelated persons who reside in one domicile for convenience or economy. To identify those households with several wage-earners as opposed to the more usual family unit with one, or two, the variable number of employed persons in the household was used. Although this does not directly deal with the relationships between household members, some inferences can be drawn. For example, given the youthfulness of the sample, households with three employed workers are less likely to be members of a family than they are to be unattached, or loosely attached individuals.

The mean number of persons employed in a household was computed to be 1.58 with a standard deviation of 0.85. Over 50.0 per cent of households had only one wage-earner while 34 per cent had two. Households with three to six (the highest number) employed persons accounted for only 10.0 per cent of the total.

4.2.9 Length of Stay in the Community

This variable was measured as the total number of years that a respondent had lived in Fort McMurray. The mean stay was short (3.19 years), while the standard deviation was large (3.85). Length of stay is a salient variable in the resource town context. A high percentage of new residents indicates that exposure to the community is limited. Length of stay also reflects time of arrival, and therefore the stage of community development at that period. Both these factors may influence consumption levels.

4.3 Method of Analysis

To test the hypotheses Nie et al's (1975) *Statistical Package for the Social Sciences* was used. The analysis was done in several stages.

4.3.1 Zero-order Correlations

The subprogram *Pearson Corr* was applied to the data in order to obtain the zero-order correlations between each pair of variables in the study using pairwise deletion of missing data. Pearson correlation coefficients "summarize the strength of association between a pair of variables" and "provide an easy means for comparing the strength of the relationship between one pair of variables and a different pair", but are limited by the lack of control over outside influences (Nie et al, 1975:276, 280). The results of this procedure are reported later in the chapter.

4.3.2 The Linearity Test: The Breakdown Program

In linear correlation and regression the relationships between variables are presupposed to be linear and additive (Nie et al, 1975:261). A linear regression model which minimizes the total squared vertical distance of each point from the regression line may not be appropriate if the variables are non-linearly related. A test for linearity was therefore routinely made using the *Breakdown* procedure. In this test a significant difference between eta squared and R squared indicates that the relationship is significantly non-linear.[13]

Certain curvilinear relationships may be transformed into linear ones by transforming one of the variables (Edwards, 1976). Non-linear relationships may also be handled by forming a series of binary variables from the linear independent variable.[14] If visual inspection of a graph of the relationship suggested that employing transformation methods would practically adjust for non-linearity a transforming procedure was followed. The linearized form of the variable was then re-entered into the

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[13]The difference between eta squared (the non-linear correlation coefficient squared), and R squared indicates the proportion of the variance explained by a non-linear relationship (Nie et al, 1975:261). The significance level used was 0.05.

[14]Stage in the life cycle is a good illustration of the usefulness of the latter technique. In cases like this where the independent variable was not an interval variable and the various stages of the life cycle were assigned numbers for the convenience of the researcher, a number of dummy variables corresponding to each of the phases was created, thus assuring linearity.

regression equation and examined for significance.[15]

4.3.3 Multiple Regression Analysis

The principal mode of analysis used in this thesis was multiple regression whereby a single dependent variable is simultaneously predicted from a regression equation involving several independent variables. Multiple regression not only allows one to "find the best linear prediction equation and evaluate its prediction accuracy", it also controls for other confounding factors in order to evaluate the contribution of a specific variable or set of variables (Nie et al, 1975:321). The independent variables were entered into the regression equation for each of the seven dependent consumption variables using the default statistical criteria of the forward stepwise regression method listed in *New Regression* with listwise deletion of missing data (Nie and Hull, 1981:107).[16] To maximize the sample size and simplify results a reduced form regression equation was run for each type of consumption using only the significant predictors for that index.[17]

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[15]In some cases transforming the relationship into a linear form was impractical because it would involve the dependent variable in a multiple regression. For example, logging one of the dependent consumption scales may serve to eliminate the non-linearity between one predictor variable and that consumption index, but this would detract from all the other correlations with this same dependent variable.

[16]The tolerance criterion in this method is 0.01, with the probability of F to enter as 0.05 and the probability of F to remove as 0.100 (Nie and Hull, 1981:107).

[17]If R squared remains constant while N increases one can gain confidence in the reliability of the prediction.

In general this analysis compares the values of Beta, the standardized partial regression coefficient, rather than B, the unstandardized form of the partial regression coefficient.[18] When the dependent variables do not have interpretable metrics, standardizing the partial regression coefficient so the B is now in "artifical" metrics (Beta) is valuable. For example, it is not particularly meaningful to say that for every increase of one unit in occupational status the number of household posessions increases by 0.127. Where the dependent variable has more inherently meaningful metrics, such as debt in hundred's of dollars, a closer examination of B, the unstandardized partial regression coefficient is warranted.

4.3.4 Covariance Analysis

As one final elaboration on the additive models identified in the multiple regression analysis, selected regression runs were repeated to examine effects in different subpopulations. Differences in the determinants of consumption levels between such groups could then be evaluated. The first variable selected as a covariate, length of stay in the community, provides a crude migration cohort analysis of long term (at least 1.5 years) versus short term (less than 1.5 years) residents. It was felt that

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[18] The standard partial regression coefficient, Beta, represents the slope of the line when all the variables are Z transformed to have means of zero and standard deviations of one (Kerlinger and Pedhazur, 1973:65).

period effects and longer exposure could change the influence of the independent variables on consumption. The second covariate, sector of employment, was chosen here because those working for core sector employers received housing subsidies and benefits not received by peripheral sector employees (Gartrell et al, 1980). Different factors might therefore be important for the consumption of these two groups.

For example, a comparison was made of the significant predictors for each type of consumption between the two subpopulations differing by length of stay. From this, predictors with divergent B's were identified, again for each of the seven dependent consumption variables. Length of stay was recoded as a dummy variable with zero assigned to the group staying less than one and a half years and one assigned to their counterparts staying longer. The predictors identified above were then multiplied by this binary variable to create a new variable representing the interaction of length of stay with the predictor in question. These new interaction variables were then entered into the regression equations for the relevant type of consumption, along with the original (eleven) independent variables. If any of the interaction variables entered the equations as significant predictors, it was concluded that the effects of that variable differed significantly by length of stay in Fort McMurray. This procedure was repeated for sector of employment.

4.4 Measurement Results: Zero-order Correlations

4.4.1 Intercorrelations of the Consumption Indices

Table Two shows the zero-order correlations of all the variables in the study. Correlations significant at the 0.05 level were found between consumption variables with two exceptions. The leisure scale and the investment index exhibited a low correlation of -0.029 while leisure and credit card use were correlated -0.077. These small negative correlations seem to indicate that the leisure index is measuring a somewhat different aspect of consumption than are the other indices, or that leisure as a form of consumption "competes" with other consumption types for a consumer's time, energy, or money (Felson, 1975:35).

The overall level of living scale is a good summary of different consumption types. All consumption measures correlated significantly with this total index. Higher correlations were found, logically enough, between the level of living index and its four component scales (the vehicles, durables, investments, and leisure scales) than with either credit card use or debt. At the same time, however, these correlations were not so high that the justification for partitioning the overall consumption index further was removed. The fact that the correlations with particular predictor variables varies from one consumption scale to another also bolsters this argument.

TABLE TWO: ZERO-ORDER CORRELATIONS

VARIABLES	10	11	12	13	14	15	16	17	18
1. Vehicles	---	.125'	.430'	.222'	.028	.092'	-.098'	-.145'	-.017
2. Durables	.432'	---	.156'	.107'	.054	.228'	.061'	-.021	-.074
3. Investments	.275'	.497'	---	-.032	-.102'	.010	-.197	-.007	-.069
4. Leisure	.093'	-.098'	-.029	---	.128'	.167'	.064	-.128'	.348'
5. Household Level of Living	.660'	.780'	.630'	.417'	---	.347	.546'	-.088'	.119'
6. Credit Card Use	.146'	.270'	.367'	-.077	.249'	---	.364'	-.043	-.013
7. Debt	.140'	.183'	.107'	-.113'	.145'	.154'	---	.328'	.066
8. Household Income	.115'	.249'	.366'	-.126'	.181'	.243'	.250'	---	-.046
9. Occupational Status	.050	.288'	.400'	-.043	.267'	.357'	.020	.277'	---
1. Vehicles	-.005	-.052	-.012	.148'	.085'	.192'	.140'	.140'	.220'
2. Durables	.165	.171'	.067	.230'	.356'	.385'	.433'	.094'	.229'
3. Investments	.320'	.227'	.228'	.365'	.135'	.274'	.068	-.060	.256'
4. Leisure	.017	-.099'	.090'	-.240'	-.189'	-.330'	-.165'	.124'	-.018
5. Household Level of Living	.210'	.107'	.102'	.178'	.218'	.188'	.235'	.123	.303'
6. Credit Card Use	.265'	.132'	.285'	.115'	-.015	.137'	-.086'	-.115'	.032
7. Debt	-.062	.050	-.013	.013	.076	.160'	.018	.007	.122'
8. Household Income	.154'	.194'	.165'	.177'	.057	.301'	-.035	-.133'	.039
9. Occupational Status	.722'	.213'	.490'	.220'	.033	.182'	-115'	-.146'	.053

10. Social Class 11. Sector of Employment 12. Level of Education 13. Respondent's Age 14. Stage in the Life Cycle 15. Marital Status 16. Household Size 17. Number of Employed persons in the Household 18. Length of Stay in the Community

' Significant at the .05 level or less

Note: Correlations among variables 10-18 appear above the diagonal in the top right section of the matrix. Correlations among variables 1-9 are below and to the left. The 9x9 matrix that forms the bottom half of the table contains the correlations between these two sets of variables (1-9 and 10-18).

However, difficulty arises when the vehicles scale is considered. Some researchers might argue, with some basis, that vehicles are really a form of durables. It is a moot point whether items in the vehicles index such as motor cycles, snowmobiles, and boats are intrinsically different from durables like skis, guns, and bicycles. The moderate correlation between the two scales of consumption (0.432) seems to suggest that this overlap problem is not severe. Together with the question of the relationship between owning one type of vehicle and a second type in the scale, this casts some doubt on the integrity of the vehicles scale in particular.[19]

4.4.2 Correlations with the Independent Variables

The question of the discreteness or overlap between consumption measures is likewise present in the independent variables. Multicollinearity may be a problem where high significant correlations are found between predictors. In such cases the multiple regression results should be interpreted cautiously.

Table Two shows that among the stratification variables occupational status and social class are the most closely correlated (0.722), followed by occupational status and

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[19]In the preliminary examination of the data the vehicles index was split into a recreational vehicles scale and a transportation vehicles scale. The results of the zero-order correlation analysis between these scales and both the dependent and independent variables in the study did not yield any reason to believe that such a separation would improve prediction.

level of education (0.490), education and social class (0.430), and income and occupational status (0.277). Income also shows a moderate correlation with marital status (0.301). Stage in the life cycle and household size (0.546) are the most closely correlated of the demographic variables, followed by marital status and household size (0.364), respondent's age and length of stay (0.348), and household size and number of employed persons in the household (0.328). Controlling for predictors that are themselves significantly related may weaken the correlations with the consumption indices. In cases like these the effect of one variable on the consumption scale cannot be separated from the effect of the second variable.

4.5 Discussion: Limitations and Caveats

Several caveats should be noted with respect to both the method of measuring consumption and the composition of the scales.

Many of the earliest scales developed by rural sociologists suffer from temporal and cultural lag (Belcher, 1972, Felson, 1976). A second restriction of level of living scales is their tendency to measure "ownership of material goods" and not the function of the item (Belcher, 1972:218). By asking only for ownership or possession one is assuming a standard use of the item.

While this survey simply asked for possession and not ownership per se, the problem of defining the function of

the items still applies. Probably the most serious difficulty is posed by the items in the vehicles scale. Is the primary purpose of owning a truck camper, for example, to fill a transportation need or is it more for recreational pastimes? Does home ownership imply a concern with investment and financial security or is it mainly for comfort in daily living? The scale that suffers least from ambiguity of function is the leisure index. A further problem is that the scales are not weighted for the dollar value of the individual items, nor do they reflect the equity in possessions where money was borrowed to purchase the good.

One area connected with the problem of defining a good's function is the motivation behind consumption. Since this implies a socio-psychological approach to consumption, it is beyond the scope of this thesis which concentrates on the analysis of consumption at the aggregate or societal level. Another limitation concerns the number and kind of independent variables in the study. The amount of variance explained is constrained by the available predictors. Where divergent kinds of consumption are analysed by the same small set of predictors the conclusions are necessarily more limited.

A different kind of caveat applies to the resource town context of this study. Without further research, generalizations from the results of this Fort McMurray survey to either other resource centers or to urban or rural

communities must be made cautiously. In this connection, the nature of the collected data also imposes limitations on this study. Although designed to accomodate a return survey at a different date, no longtitudinal data were currently available. Moreover, the questionnaire was not directed specifically at studying consumption. Rather it dealt with a wide range of "quality of life" issues. This has its disadvantages, but it does increase the number of potential predictors to chose from. In fact, this may have been beneficial because some of the á priori decisions made by consumption researchers about the variables to be included were avoided.

5. Chapter Five: Consumption in a Resource Community: Results

As discussed in Chapter Four, interpretation of significant zero-order correlations between the consumption indices and the independent variables in this study is limited since many of the predictor variables are themselves intercorrelated. Multiple regression analysis is necessary to show which factors have independent effects on the consumption scales, and the strength of these factors as determinants of consumption.

5.1 Multiple Regression Analysis

5.1.1 Vehicles

The reduced form regression equation for the vehicles index of consumption is presented in Table Three. Sector of employment, the only stratification variable to enter the regression equation as a significant predictor, correlated negatively with the vehicles scale, meaning that employment in the core oil sector *decreases* a household's score on the vehicles scale of consumption. One possible explanation of this result is that core sector employees have access to free bus transportation to work. Another is that workers on mobile job sites, such as construction employees, are assigned to the peripheral sector.

All three demographic variables in the equation, length of stay in the community, marital status, and stage in the

Table Three: Determinants of the Vehicles Index of Consumption

Independent Variable	B	St Error	Beta	t*	r
1. Length of Stay in the Community	0.0938	0.0236	0.1900	3.970	0.220
2. Marital Status	0.7647	0.2223	0.1735	3.441	0.194
3. Stage in the Life Cycle	0.5896	0.2242	0.1324	2.630	0.213
4. Sector of Employment	-0.3616	0.1826	-0.0953	-1.980	-0.0570
(Constant)	1.4889	0.2022		7.363	

	ANOVA	DF	SS	MS	F	SIG F
R^2 =0.1092	REG	4	160.5	40.13	12.44	0.0000
R^2c=0.1004	RES	406	1309.4	3.225		

* Significant at the .05 level

life cycle, were better predictors than sector of employment. The best of these was length of stay in the community with a Beta of 0.190 (r=0.220). Longer term residents may have purchased more vehicles to provide convenient accessibility to community services and recreational sites in a town where public transportation is limited and the physical distances (between amenities) relatively large.

Compared to singles, married persons owned more vehicles. This relationship is not a simple function of the number of persons available to use the vehicles at any one time, since household size and number of employed persons in the household did not enter the equation. Married persons may feel that more vehicles are "necessary" to their lifestyles and not luxuries. They may also have more uses for vehicles, beyond transportation to work or essential services. For example, married persons may possess more recreational vehicles for the kind of leisure activities that singles do not favor.

It is noteworthy that married persons with older children scored significantly higher on the vehicles scale of consumption than did persons in other life cycle stages, even after controlling marital status. Again, an explanation may lie in the emphasis placed on vehicle ownership as an adjunct to recreational pursuits. However, this stage of the life cycle is also likely to involve the most shuttling of family members from one activity to the next. The children

are old enough to participate in extracurricular lessons and games, and the parents may be more concerned with community matters.

Length of stay in the community, marital status, stage in the life cycle and sector of employment explained only 10.9 per cent of the variance in this consumption index. The low per cent of variance explained may result from the attenuation in variance due to the pervasiveness of vehicle ownership in Fort McMurray. A spread out townsite, high incomes, and a high demand for recreation are all factors contributing to this situation.

Two stratification variables hypothesized to be significant predictors of the consumption of vehicles, income and occupational status, failed to enter the regression equation. Resource town characteristics such as the physical layout and geographic location of Fort McMurray are probably factors in this result as well as the high incomes of the residents. Vehicle ownership appears to be of equal priority to all occupational groups and well within the reach of the majority of households.

5.1.2 Durables

The results of the multiple regression analysis presented in Table Four indicate that five variables were significant predictors of the consumption of durables: income, occupational status, length of stay in the community, marital status, and household size. These

Table Four: Determinants of the Durables Index of Consumption

Independent Variable	B	St Error	Beta	t*	r
1. Household Size	0.8318	0.0914	0.4266	9.101	0.459
2. Occupational Status	0.0629	0.0108	0.2611	5.846	0.272
3. Length of Stay in the Community	0.2214	0.0425	0.2201	5.207	0.269
4. Marital Status	1.190	0.3657	0.1585	3.253	0.407
5. Household Income	0.2472 E-04	0.9692 E-05	0.1169	2.551	0.242
(Constant)	-2.112	0.6324		-3.340	

	ANOVA	DF	SS	MS	F	SIG F
R^2 =0.4191	REG	5	1463	292.6	47.62	0.0000
R^2c=0.4103	RES	330	2028	6.144		

* Significant at the .05 level

variables accounted for an important part (41.9 per cent) of the variance in the consumption of durables.

Income was hypothesized to be a good predictor of the consumption of durables, but it actually explained the least variance of all the five predictors. Although Hypothesis One is supported by this evidence, the relatively small standardized regression coefficient (Beta=0.117) implies that the influence of income, while significant, is of secondary importance.

The only other stratification variable predicted to enter the regression equation for the durables index, occupational status, proved to have a significant positive effect even after controlling for income. Several researchers have noted that the choice of durables in a study influences the relative strengths of income and occupational status as predictors, however, in Fort McMurray occupational status differences appear more important than income differences as far as durable consumption is concerned (Myers, Stanton, and Haug, 1971, Schaninger, 1981). This may be because the type of durables chosen here act as overt (visible) symbols of status position and lifestyle or because incomes are generally high in this community (Felson, 1978:49).

Overall, demographic variables have more of an impact on durable consumption than do stratification variables. Household size was by far the best predictor with a

substantial Beta (0.427).[20] What makes this correlation important is the strength of the association after controlling for the other variables in the equation, including income. Some part of this correlation may be due to the greater potential variety of interests in larger households. (Ownership of sports equipment is a good example here).

Length of stay in the community was also a significant determinant of durable consumption as predicted. It appears that the consumer expectations of resource town dwellers are justified with respect to durable goods. The results of this study confirm those of Goldthorpe and Lockwood (1969) in that the longer one lives in a resource community the more durables one will possess. Controlling for length of stay, married persons scored significantly higher on the durables index than did single persons. Given the number of home centered items in the durables scale, married persons appear to value a lifestyle revolving around home interests. Any "conspicuous consumption" among single persons does not extend to the collection of (durable) possessions. A correlation between singleness and leisure would further support these conclusions.

Despite predictions to the contrary, neither age nor stage in the life cycle had a significant influence on the consumption of durables. Controlling for predictors that had

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[20]Household size also had the largest zero-order correlation with the durables index of consumption (0.433). Number of employed persons does not directly affect the consumption of durables.

significant zero-order correlations with age, or for length of stay in the community, may have weakened any relationship between the age variable and the durables index. A similar argument is applicable to stage in the life cycle and household size.

5.1.3 Financial Investments

As Table Five shows, several of the variables that determined the consumption of durables were also important in explaining the possession of financial investments. Five variables: occupational status, household income, age, marital status, and length of stay in the community, accounted for 33.2 per cent of the variance in the investment index of consumption. Unlike the durables index, these predictors had similar Betas with no one variable standing out as a key predictor in investment consumption.

The significant correlation with income was predictable because of the pecuniary orientation of the items in the investment scale. The significance of occupational status may be explained by the emphasis placed on both control of and provision for the future by those of higher occupational status. For those with higher status, investments may be a way of ensuring that present consumption levels (and their status conveying connotations), can be maintained even after retirement, for example.

Turning to the demographic factors, the effects of age may result from the steady accumulation of financial assets

Table Five: Determinants of the Investments Index of Consumption

Independent Variable	B	St Error	Beta	t*	r
1. Occupational Status	0.0330	0.0061	0.2450	4.989	0.366
2. Household Income	0.2342 E-04	0.5927 E-05	0.2021	3.951	0.380
3. Respondent's Age	0.0383	0.0104	0.1870	3.672	0.356
4. Length of Stay in the Commuity	0.1009	0.0274	0.1815	3.678	0.275
5. Marital Status	0.6993	0.2063	0.1664	3.390	0.293
(Constant)	-1.358	0.4126		-3.292	

	ANOVA	DF	SS	MS	F	SIG F
R^2 =0.3316	REG	5	327.6	65.54	30.46	0.0000
R^2c=0.3207	RES	307	660.5	2.151		

* Significant at the .05 level

with increasing age, to a peak near the years of career consolidation or retirement.[21] While the youthfulness of the Fort McMurray community limits conclusions regarding the effect of ageing on financial investments, the fact that age and length of stay in the community are significantly correlated suggests that growing older in a resource community encourages the accumulation of investments. Since the ambition to "make good money" and take an easier job is a factor in migration to resource communities, it is logical that those who are older should try harder to achieve this goal while still working at resource town wages, that is, invest more money to make more money. Younger persons, seeing a longer period in which to accomplish this aim, may be more inclined to spend money on present oriented and immediately gratifying forms of consumption. The significant correlation between the investment index and length of stay can also be explained by these arguments. Again the ambition to "get ahead" and "take it easy" somewhere less isolated and more comfortable, may act as a pressure toward investment among those who have stayed longer.

As predicted, married persons possessed significantly more investment items than did single persons, even when income was controlled. One cannot argue that married persons invest to protect their spouse and/or family in the event of

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[21]There is reason to believe that the relationship between age and number of investments owned would be stronger except for the deviation from linearity observed when the breakdown results were plotted. The graph implies that a closer relationship would exist between the log of the number of investments and age.

their death, because some of the single group are single parents and would have similar security needs. It appears that single persons do not place such a high value on future security or income generating assets as do married people, at least when it comes to a choice between investment or some other kind of consumption. A significant correlation between "single" and the more immediately gratifying, less security conscious leisure consumption scale would support this interpretation.

Despite significant zero-order effects, stage in the life cycle did not enter the regression equation for the investment index as predicted. Since stage in the life cycle is itself significantly correlated with age (0.128) it seems likely that controlling for age may have mitigated the correlation between life cycle stage and investment consumption. The presence and ages of children do not, therefore, appear to influence adult investment consumption. The apparent lack of concern with investment for future security and income among single parents may be a function of the small number of persons in this category.

5.1.4 Leisure

The results of the multiple regression analysis with the leisure index of consumption present some interesting contrasts to those of the other consumption indices in this thesis (Table Six). Only two variables explained significant amounts of the variance in the leisure index of consumption:

Table Six: Determinants of the Leisure Index of Consumption

Independent Variable	B	St Error	Beta	t*	r
1. Marital Status	-2.044	0.3125	-0.3055	-6.540	-0.335
2. Respondent's Age	-0.0584	0.0140	-0.1945	-4.164	-0.240
(Constant)	3.329	0.4870		6.837	

	ANOVA	DF	SS	MS	F	SIG F
R^2 =0.1489	REG	2	494.0	247.0	34.91	0.0000
R^2c=0.1447	RES	399	2823	7.076		

* Significant at the .05 level

age, and marital status. There were no significant interaction effects of age and marital status on leisure.[22]

As hypothesized, no stratification variables proved useful in explaining leisure consumption. The best predictor in the equation was marital status (Beta=-0.306). Single persons scored significantly higher on the consumption scale than did married persons. The single and childless stage of the life cycle might have been a significant predictor of leisure if it were not for the correspondence between this phase and the single category of the marital status variable.[23]

These findings suggest that leisure consumption is a high priority with singles, given that single persons have significantly fewer vehicles, durables, and investments. Not only do single persons appear to prefer spending their money (and time) on leisure, but this leisure, as measured here, is geared to entertainment and is less home centered. Generally, the activities included in the leisure scale also offer the chance for adult interaction. These may be key factors in explaining the affinity of single persons for leisure consumption. Lacking a spouse, single persons may feel a stronger need to interact with other adults, or be

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[22]When the product of the original age and marital status variables was entered with all eleven independent variables, or with age and marital status alone, the interaction term did not improve prediction.

[23] Except for the small group of persons (7.0 per cent) who were classified as single parents, the two groups are synonomous. Since single parents are second only to the single and childless group in their consumption of leisure, it is probably "singleness" rather than the presence or absence of children that is operating here.

entertained, than do married persons. Furthermore, single persons may prefer a more public environment and atmosphere to that of their homes.

The second significant predictor of the leisure index was age. Leisure consumption was found to decrease as age increased.[24] Younger persons may prefer this more public and activity oriented kind of consumption. Older persons may have less energy for such pursuits, or may prefer a quieter, more home centered lifestyle. Another possible explanation is that younger persons place a higher priority on leisure than do older persons. That is, when income is not unlimited consumption choices must be made and older persons may prefer to buy more investments instead of indulging in more leisure, for example.[25]

Many of the determinants of other types of consumption did not prove useful in predicting the consumption of leisure, including traditional consumption research variables like income or occupational status, demographic variables like household size, and resource community variables like length of stay, or sector of employment. It may be inferred that the leisure index is measuring a quite different kind of consumption that has little in common with the other types discussed in this thesis. Examination of the

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[24] The test for linearity indicated that the relationship between age and leisure was significantly non-linear, but linearity could only be improved by logging the leisure index. This was impracticable.

[25] It would be interesting to compare older persons in luxury retirement complexes to see if leisure is emphasized when financial security is already high.

zero-order correlations between the leisure index and the other measures of consumption shows that the only significant correlation of any size is with the overall level of living scale (0.417) of which it is a part.

5.1.5 Overall Level of Living

The pressure of different predictors for different aspects of consumption emphasizes the need to treat them separately and accounts (in part) for the modest amount of variance explained for the total level of living index. Together, the three variables identified as significant predictors of household level of living: length of stay in the community, occupational status, and household size, explained 23.7 per cent of the variance in the overall level of living scale. Table Seven presents the results.

Occupational status was the only stratification variable accounting for a significant amount of the variance (Beta=0.281) in overall level of living. There are elements of both achievement and ascription in one's occupational status and a higher level of living may be considered a "reward" for acquiring a higher occupational status or even a motivation to do so. This study indicates that tangible benefits do accrue to those with higher occupational status.

As expected, the longer one stays in Fort McMurray, the higher the overall consumption level of his or her household. This result is compatible with the conclusions of other resource town researchers (Goldthorpe and Lockwood,

Table Seven: Determinants of Household Level of Living

Independent Variable	B	St Error	Beta	t*	r
1. Length of Stay in the Community	0.5355	0.0864	0.2894	6.196	0.328
2. Occupational Status	0.1270	0.0212	0.2813	6.005	0.273
3. Household Size	0.9667	0.1747	0.2593	5.532	0.251
(Constant)	-0.1873	1.2875		-0.145	

	ANOVA	DF	SS	MS	F	SIG F
R^2 =0.2369	REG	3	3058.2	1019	36.64	0.0000
R^2c=0.2304	RES	354	9850.0	27.82		

* Significant at the .05 level

1969). The perception of resource towns as places to satisfy acquisitive ambitions would seem to be justified by this result. Higher levels of living may also "trap" residents into staying longer, to maintain this same lifestyle. Following the prediction made in the hypothesis, overall consumption levels increased as household size increased. Economies of scale clearly do not significantly lower the consumption of larger households, at least in this resource community where goods must be shipped in.[26]

Neither income, social class, or sector of employment proved to be significant indicators of overall level of living as hypothesized, when occupational status, length of stay in the community, and household size were controlled. Apparently, overall consumption is somewhat more sensitive to differences in occupational status than to any gradations in these other stratification variables. However, given the small differences in zero-order correlations with level of living between these stratification measures, and given the substantial correlation among them, considerable caution must be exercised in claiming that one or the other of the stratification variables is predominant in its effects on level of living. In one sense, the effects of variables such as income on level of living may be indirect, through occupational status. That is, controlling variables like occupational status reduces their effect.

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[26]This is true because the slope is linear and is assumed to be the same for differences at any level of household size.

The demographic variable, stage in the life cycle, may have failed to enter the regression equation as predicted because of the concentration of persons in the earlier stages in the life cycle and the relatively high proportion of married residents. The variance between groups on this dimension might not be great enough to register differences in general levels of living. Such conditions may be specific to Fort McMurray. Again, differences in zero-order effects are not large enough to draw firm conclusions, and effects may be indirect through household size, for example. Likewise, the number of employed persons in the household also failed to have a significant net effect on overall consumption levels, but in this case no indirect effect can be postulated since its correlation with the variables in the regression equation is relatively low.

5.1.6 Credit Card Use and Debt

In the multiple regression analysis of credit card use (Table Eight) three stratification variables explained significant amounts of the variance: occupational status, household income, and level of education. The total variance explained by these three variables was 17.1 per cent. All three predictor variables were ones traditionally associated with general consumption in the literature.

Since the actual *acquisition* of a credit card may be contingent upon an individual's income and occupational status, it is not surprising that these two factors have a

Table Eight: Determinants of the Frequency of Credit Card Use

Independent Variable	B	St Error	Beta	t*	r
1. Occupational Status	0.2341	0.0057	0.2406	4.108	0.361
2. Level of Education	0.0727	0.0263	0.1570	2.761	0.297
3. Household Income	0.1310 E-04	0.4406 E-05	0.1531	2.973	0.242
(Constant)	0.0387	0.3130		0.124	

	ANOVA	DF	SS	MS	F	SIG F
R^2 =0.1706	REG	3	98.34	32.78	23.24	0.0000
R^2c=0.1632	RES	339	478.1	1.410		

* Significant at the .05 level

significant effect on *use* of a credit card. Persons with higher incomes or occupational status may be judged to be more credit worthy. They are also more likely to have higher credit limits on their card, which may have an effect on the frequency with which a card can be used.

Level of education was significantly related to both household income and occupational status at the zero-order correlation level and its effect on credit card use persists in the multiple regression analysis. The combination of occupational status and education is frequently encountered in consumption studies under the label "social class" (Mathews and Slocum, 1969, Slocum and Mathews, 1970). It is evident from the results of this study that the relationships between credit card use and these two variables is strong enough to be significant even when occupational status and education are treated as separate entities. Credit card use among upper income, higher status, better educated persons is supposed to be a convenient and modern way to purchase goods and services, according to consumption researchers (Mathews and Slocum, 1969:78, Plummer, 1971:41). In as much as innovative, new, and modern ways of doing things are readily accepted by those with more education and higher status or income, greater frequency of credit card use among such individuals is compatible with this perception of credit cards as convenient and modern.

No demographic variables entered the regression equation as determinants of credit card use, although both

life cycle stage and marital status were predicted to do so. Lansing and Morgan (1955) and Murphy and Staples (1979) hypothesized that married persons with young children would use credit cards more to compensate for incomes that had become inadequate for their needs. The expenses of having children, buying a house (another consumer priority at this stage according to the authors), and perhaps loss of the wife's income while child rearing, were presumed to put pressure on the income of the working spouse, making some budget adjustments necessary. The results of this study do not support this hypothesis. It is likely that the effects of life cycle stage or marital status were negligible once income was controlled.

It should be recognized that measuring *frequency* of credit card use limits the conclusions that may be drawn. The measure does not provide any insight into the *types* of goods purchased or the *purpose* of using credit cards, except indirectly. Demographic factors should not be dismissed as unimportant to credit card use for these reasons. It seems likely that the predictors will depend on the specific measure of credit card use adapted in a study.

The last consumption measure in this study, debt, is an important one for resource community residents, considering their "get rich" ambitions (Van Dyke and Loberg, 1978, Gartrell et al, 1980). Debt was measured in hundreds of dollars and therefore both the partial slopes (B's) and the Betas can be examined (Table Nine). The unstandardized

Table Nine: Determinants of Debt

Independent Variable	B	St Error	Beta	t*	r
1. Household Income	0.0011	0.2290 E-03	0.2547	4.633	0.256
2. Length of Stay in the Community	2.588	1.055	0.1330	2.454	0.173
3. Social Class	-14.96	7.288	-0.1116	-2.052	-0.072
(Constant)	10.35	7.090		1.459	

	ANOVA	DF	SS	MS	F	SIG F
R^2 =0.0962	REG	3	119145	39715	11.17	0.0000
R^2c=0.0875	RES	315	1120061	3555.8		

* Significant at the .05 level

partial regression coefficient for household income shows that for every ten dollars of income debt increases by one dollar. Some of this effect may represent ability to borrow money, that is, persons with more money can often borrow more since they are judged by lending institutions to be better risks. Those with higher incomes can also carry more debt, that is, they can "afford" to be further in debt.

Contrary to predictions, members of the "labour-controlled" class were 1496 dollars more in debt than members of the managerial/professional class. The literature gives no reason to suspect that debt would decrease as social class increased. This effect is net of "ability to pay" since income is controlled. The resource town setting could have an influence on this relationship.

Certainly debt is significantly affected by one resource community variable, length of stay. As predicted, the longer a person had resided in Fort McMurray the more debt he or she had. These findings agree with those of Goldthorpe and Lockwood (1969) and substantiate the suggestions of Van Dyke and Loberg (1978) and Larson (1979). Firstly, the longer a person stays, the more "credit worthy" that person becomes. Secondly, longer term residents may feel a greater need to indulge in conspicuous consumption as a reward (or solace) for living in an isolated resource community. Again, the effects of length of stay, like social class are net of the person's ability to pay. While one factor in the accumulation of debt appears to be ability to

pay, as represented by the significance of household income, a more complex factor or series of factors also influences debt. This seems to be partly a resource town phenomenon in that excessive consumption appears to be a way of compensating for "missing" urban pleasures and an urban way of life.

As noted in Chapter Four the relatively high significant zero-order correlation (0.722) between occupational status and social class could have prevented the former variable from entering the debt equation as hypothesized. Apparently, gradations of status are not as important in judging "credit worthiness" as is one's relative position in the labour market. Among the demographic variables, age and marital status failed to enter the regression equation as predicted. Significant zero-order effects of income, social class, and particularly length of stay on age likely diminished any relationship between age and debt. Similarly, marital status may affect debt only through its relationship with income. Altogether, a low proportion of the variance in debt was explained by the variables in this study (R squared=0.096).

5.2 Covariance Results

The covariance analysis was employed primarily as an exploratory device to compare consumption between broad migration cohorts and between different employment sectors. Multiple regressions were run selecting different

subpopulations by length of stay or sector of employment. In cases where the B's of the predictors were observed to vary by subgroup, an interaction variable was created by multiplying the predictor by a binary variable encoding the subpopulations of the covariate in question. A new multiple regression equation was then run incorporating both these interaction terms and the original independent variables. If one of the interaction variables proved to be a significant predictor, the effect of that variable on consumption was considered to differ by either length of stay or sector of employment.

5.2.1 Length of Stay in the Community

For the first subgroup analysis respondents were compared according to their length of stay in the community. The 246 persons (58.9 per cent) who reported living in the community for at least one and half years were distinguished from the 172 persons (41.1 per cent) who had been there less than one and half years. It was reasoned, following Gartrell et al (1980), that since wages in Fort McMurray were higher than the provincial or national average, persons who had worked at resource town wages for at least a year would have higher incomes than those newly arrived. Presumably, those who had lived in Fort McMurray for a year and a half or more would be reporting an annual income for 1978 earned entirely while residing in the town. Also, if resource community residence influenced debt or consumer acquisitions the

difference should be noticeable after this period of time (Goldthorpe et al, 1969, Gartrell et al, 1980).

The significant main effects of length of stay, marital status, life cycle stage (all positive), and sector of employment (negative), accounted for only 10.9 per cent of the variance in the consumption of vehicles (Table Three) compared to the 17.6 per cent explained by the equation in Table Ten. Since the B's and standard errors for marital status and life cycle stage are similar in both equations, the improvement in prediction power is likely due to the interaction variables: length of stay by age, and length of stay by sector of employment. The fact that number of employed persons in the household also enters the equation is understandable when one considers that many people drive to work.

The effect of age and sector of employment on the consumption of vehicles is different for the two subpopulations and depends on length of stay in the community (Table Ten). Age has a greater positive effect on the consumption of vehicles if one has lived in the town longer than if one is a relative newcomer. The vehicles index of consumption is greater for those in the core and peripheral sectors of employment if length of stay is shorter.

Length of stay may heighten the positive consumption effect of ageing on vehicle consumption by creating a feeling of urgency about achieving pre-migration consumption

Table Ten: Determinants of the Vehicles Index of Consumption by Length of Stay in the Community

Independent Variable	B	St Error	Beta	t*	r
1. Length of Stay in the Community x Respondent's Age	0.0464	0.0070	0.4087	6.595	0.294
2. Length of Stay in the Community x Sector of Employment	-1.1541	0.2641	-0.2738	-4.369	0.013
3. Stage in the Life Cycle	0.5930	0.2558	0.1245	2.318	0.204
4. Marital Status	0.6069	0.2459	0.1341	2.468	0.160
5. Number of Employed Persons in the Household	0.2697	0.1132	0.1213	2.384	0.102
(Constant)	0.8681	0.2960		2.933	

	ANOVA	DF	SS	MS	F	SIG F
R^2 =0.1758	REG	5	219.8	43.95	13.77	0.0000
R^2c=0.1630	RES	323	1030	3.190		

* Significant at the .05 level

goals, or because ageing is more likely to accentuate a need to indulge in more consumption as compensation for the "deprivations" of living in an isolated resource town for longer term residents. It is more difficult to explain why newly arrived core and peripheral sector employees engage in more vehicle consumption than longer term core or peripheral sector workers. Some of this consumption may be related to initial transportation needs like mobility to find a job, get to work, or to reach other facilities. (Longer term core sector employees are more likely to have work transportation provided, or company vehicles).

Significant variations by length of stay were also found with the durables index (Table Eleven). Household size had a greater (positive) effect on the consumption of durables, the longer the stay. Since both household size alone and the product of household size and length of stay entered the regression equation, not all the effect of household size on durable consumption is the consequence of length of residence in the community.

A comparison of the B's for occupational status and marital status shows them to be relatively constant across both equations (Table Four and Table Eleven). Income is replaced by age as a significant predictor of durables by length of stay. However, prediction power did not improve much from the original regression equation's 41.9 per cent of the variance explained (Table Four) to the 43.5 per cent of the covariance analysis results (Table Eleven).

Table Eleven: Determinants of the Durables Index of Consumption by Length of Stay in the Community

Independent Variable	B	St Error	Beta	t*	r
1. Length of Stay in the Community x Household Size	0.4611	0.0736	0.3107	6.265	0.526
2. Marital Status	1.0520	0.3522	0.1408	2.987	0.404
3. Occupational Status	0.0579	0.0106	0.2401	5.454	0.264
4. Household Size	0.5320	0.1012	0.2726	5.256	0.456
5. Respondent's Age	0.0409	0.1630	0.1087	2.508	0.249
(Constant)	-1.6950	0.7364		-2.302	

	ANOVA	DF	SS	MS	F	SIG F
R^2 =0.4350	REG	5	1500	300.0	50.35	0.0000
R^2c=0.4264	RES	327	1948	5.959		

* Significant at the .05 level

Similarly there was little change in prediction power for the investment index when an interaction term was introduced into the equation (Table Twelve). The significant main effects of occupational status, income, respondent's age, length of stay, and marital status accounted for 33.2 percent of the variance in investment consumption (Table Five), while the second equation with length of stay by occupational status as an additional significant predictor explained 34.4 per cent (Table Twelve).

The positive effect of occupational status on investments was found to be greater for longer term residents than for short term residents (Table Twelve). While those with higher occupational status seem predisposed to favor the acquisition of investments, those who have worked for resource town wages longer may have increased their means for doing so. That is, they have earned more income in a resource community setting. Furthermore, it is likely that the desire to accumulate investment assets to sustain a high level of living after leaving the resource community is added stimulation. With longer residence the disadvantages of resource town living may be more irritating and the desire to attain "enough" financial security to leave stronger.

Prediction accuracy for the leisure index was noticeably increased with the addition of interaction effects (Table Thirteen). The significant main effects of marital status and respondent's age accounted for 14.9 per

Table Twelve: Determinants of the Investments Index of Consumption by Length of Stay in the Community

Independent Variable	B	St Error	Beta	t*	r
1. Length of Stay in the Community x Occupational Status	0.0154	0.0035	0.2281	4.369	0.419
2. Household Income	0.2070 E-04	0.5956 E-05	0.1781	3.476	0.381
3. Respondent's Age	0.0438	0.0100	0.2137	4.403	0.356
4. Occupational Status	0.0226	0.0070	0.1681	3.250	0.366
5. Marital Status	0.6139	0.2048	0.1460	2.998	0.293
(Constant)	-1.0525	0.4177		-2.520	

	ANOVA	DF	SS	MS	F	SIG F
R^2 =0.3439	REG	5	339.8	67.95	32.07	0.0000
R^2c=0.3331	RES	306	648.4	2.119		

* Significant at the .05 level

Table Thirteen: Determinants of the Leisure Index of Consumption by Length of Stay in the Community

Independent Variable	B	St Error	Beta	t*	r
1. Marital Status	-2.1398	0.3448	-0.3178	-6.206	-0.354
2. Respondent's Age	-0.1003	0.0194	-0.2960	-5.171	-0.289
3. Length of Stay in the Community x Respondent's Age	0.0253	0.0096	0.1497	2.636	-0.037
(Constant)	4.2405	0.5731		7.399	

	ANOVA	DF	SS	MS	F	SIG F
R^2 =0.1924	REG	3	525.6	175.5	25.57	0.0000
R^2c=0.1849	RES	322	2210	6.864		

* Significant at the .05 level

cent of the variance in the original equation (Table Six), but with the addition of the interaction term length of stay by respondent's age and an increase in the main effect of age (from a B of -0.058 to a B of -0.100) the variance explained rose to 19.2 per cent (Table Thirteen).

The effect of age on leisure is larger for those who have lived in the community longer. This may be due to their greater knowledge of the leisure facilities available, or may represent an attempt to alleviate the monotony of resource town living.

Overall level of living was better explained (28.6 per cent) by the combination of occupational status, life cycle stage, and the interaction term length of stay by household size (Table Fourteen) than by the significant main effects of length of stay, occupational status, and household size (Table Seven). The latter equation explained 23.7 per cent of the variance. The B for occupational status did, however, drop from 0.127 (Table Seven) to 0.083 (Table Fourteen). Controlling for effects of occupational status and stage in the life cycle, the effect of household size on overall level of living was larger for persons who had resided longer in Fort McMurray. It appears, then, that the consumption pressure of household size increases as length of stay increases.

Examining the covariance results for frequency of credit card use leads to the conclusion that the two subpopulations do not differ by length of stay on this

Table Fourteen: Determinants of Household Level of Living by Length of Stay in the Community

Independent Variable	B	St Error	Beta	t*	r
1. Length of Stay in the Community x Household Size	1.2046	0.1390	0.4454	8.668	0.488
2. Occupational Status	0.0830	0.0219	0.1876	3.787	0.225
3. Stage in the Life Cycle	1.5573	0.7347	0.1089	2.120	0.243
(Constant)	4.3842	1.1189		3.918	

	ANOVA	DF	SS	MS	F	SIG F
R^2 =0.2860	REG	3	2969	989	39.12	0.0000
R^2c=0.2787	RES	293	7412	25.3		

* Significant at the .05 level

measure of consumption.

For the dependent variable debt, however, a difference in length of stay by age was found (Table Fifteen). It may be inferred from the negative B of the interaction variable that the effect of age on debt is intensified when length of stay is shorter. This implies that for relative newcomers age has a stronger influence on the accumulation of debt than it does where length of stay is greater than or equal to 1.5 years. Considering the image of resource communities as places to get rich and spend money freely, this is a predictable result. One may conjecture that young newcomers, lacking the resources to consume at the same level as more established, older residents, but having the same consumer aspirations, compensate by going into debt.

Although prediction power essentially remained constant from the original debt regression equation (9.62 per cent of the variance explained, Table Nine) to the covariance regression equation (9.92 per cent, Table Fifteen), some of the significant main effects did alter sharply. The significant effect of social class on debt disappeared when the covariance regression was run. The B for income was unchanged at 0.001, but B for length of stay increased greatly from 2.59 (Table Nine) to 4.60 (Table Fifteen). Length of stay is clearly a critical variable in debt, especially in *resource town* debt.

Increasing consumption with increasing length of stay seems to be a general consumption trend most likely due to

Table Fifteen: Determinants of Debt by Length of Stay in the Community

Independent Variable	B	St Error	Beta	t*	r
1. Household Income	0.0011	0.2323 E-03	0.2667	4.784	0.256
2. Length of Stay	4.601	1.338	0.2365	3.438	0.173
3. Length of Stay x Respondent's Age	-0.5965	0.2590	-0.1632	-2.303	0.060
(Constant)	9.760	7.005		1.393	

	ANOVA	DF	SS	MS	F	SIG F
R^2 =0.0992	REG	3	122967	40989	11.57	0.0000
R^2c=0.0906	RES	315	111640	3544.6		

* Significant at the .05 level

the means to consume (high wages), the pre-migration goals of consumption, and the attitude that some "rewards" are justified for the sacrifices of resource town residence. Length of stay affects consumption more frequently through its interaction effects with demographic variables rather than stratification type variables. This suggests that long term residence in a resource town does not result in a leveling of consumption by stratification indicators.

5.2.2 Sector of Employment

A second comparison of the determinants of consumption was undertaken between households where one or more persons are employed in the core oil sector and those where none are so employed, that is, peripheral sector workers. The results indicated that the only significant difference in consumption between the subpopulations was in the consumption of vehicles (Table Sixteen). Length of stay affects the consumption of vehicles more for peripheral sector employees. Length of stay has a positive effect on the consumption of vehicles by itself and a negative one when it interacts with sector of employment. The longer one stays in the community the more vehicles one will own, but oil company employees will have fewer vehicles than peripheral sector employees who have lived in Fort Mcurray just as long. This is difficult to interpret without further evidence, other than to suggest that having free transport to work decreases the need for vehicles among oil company

Table Sixteen: Determinants of the Vehicles Index of Consumption by Sector of Employment

Independent Variable	B	Beta	t*	r
1. Length of Stay in the Community	0.2201	0.3644	6.115	0.292
2. Marital Status	0.7157	0.1582	2.904	0.160
3. Sector of Employment x Length of Stay in the Community	-0.1571	-0.2032	-3.352	0.042
4. Stage in the Life Cycle	0.6039	0.1268	2.313	0.204
5. Number of Employed Persons in the Household	0.2534	0.1140	2.221	0.102
(Constant)	0.9031		3.028	

	ANOVA	DF	SS	MS	F	SIG F
R^2 =0.1604	REG	5	200.5	40.11	12.34	0.0000
R^2c=0.1474	RES	323	1050	3.250		

* Significant at the .05 level

employees.

This equation does not add much to the conclusions drawn from Table Ten. In fact, because the variance explained is less (16.0 per cent) in Table Sixteen than when length of stay was used as the covariate (17.6 per cent, Table Ten) and the same interaction effect is represented in both equations, there is little advantage in comparing consumption across sectors of employment.

It may be deduced from this analysis of covariance that households with core sector employees have basically similar levels of consumption as households with peripheral sector employees. The vehicles index of consumption is the only conspicuous exception to this general statement. Interestingly enough, differences of treatment and working conditions in the core sector are reflected in the *lower* consumption of such households with respect to the vehicles scale.

5.3 Discussion

The emphasis in this chapter has so far been on the measures of consumption considered individually, and the effect of the independent variables on each of them. Table Seventeen compares predictors between types of consumption and provides a summary of the results.

Comparing the different scales of consumption directly, it is evident that the consumption of durables and investment consumption are closely allied. Higher incomes

TABLE SEVENTEEN: Summary of Significant Predictions and Observations[1]

Variables	Consumption Type													
	Vehicles		Durables		Invests.[2]		Leisure		Level Liv.[3]		Credit C.[4]		Debt	
	P	O	P	O	P	O	P	O	P	O	P	O	P	O
1. Household Income	+	O	+	+	+	+	O	O	+	O	+	+	+	+
2. Occupational Status	+	O	+	+	+	+	O	O	+	+	+	+	+	O
3. Social Class	O	O	O	O	+	O	O	O	+	O	+	O	O	-
4. Sector of Employment	O	-	O	O	O	O	O	O	+	Q	O	O	O	O
5. Level of Education	O	O	O	O	O	O	O	O	O	O	+	+	O	O
6. Respondent's Age	O	O	+	O	+	+	-	-	+	O	O	O	+	O
7. Stage in the Life Cycle Cycle	O	+	+	O	+	O	O	O	+	O	+	O	O	O
8. Marital Status	O	+	+	+	+	+	-	-	O	O	+	O	+	O
9. Household Size	O	O	+	+	-	O	O	O	+	+	O	O	O	O
10. Number of Employed Persons in the Household	O	O	O	O	O	O	O	O	+	O	O	O	O	O
11. Length of Stay in the Community	O	+	+	+	O	+	O	O	+	+	O	O	+	+
R squared	0.109		0.419		0.332		0.149		0.237		0.171		0.096	

[1] A significant relationship between two variables is indicated by the symbol "+", a significant negative relationship by "-" and no significant relationship by "O". "P" is the relationship predicted in the hypothesis while "O" is the observed relationship. The significance level is 0.05 or less.
[2] Investments
[3] Level of Living
[4] Credit Card Use

and occupational status, being married, and longer residence in the community are all indicators of a proclivity to consume more durables and more investments. The principal difference between the two indices is that household size has an even larger influence on the consumption of durables than predicted in the literature, and none at all on investment consumption, while ageing promotes investment expenditure and has no significant effect on the possession of durables. Also, R squared is somewhat higher for the durables index (0.419) than for the investment scale (0.332).

The literature suggests that if income is held constant a household with fewer members would have more investment capability than a larger household (Henretta and Campbell, 1978). One explanation may be that those with larger households concentrate more on investments like housing that have a practical role in everyday living. Should this be the case, the nature of the investments might vary with household size where the overall investment score might not. It may also be that those with larger households are concerned enough with security to allocate similar amounts of their resources to this type of consumption as do smaller sized households. To analyse this further, a study of consumption priorities and choices between consumption types would be needed.

Household level of living is closest to the durables index in that higher occupational status, larger household

size, and longer residence in the community significantly increase one's level of living. It is interesting that this corresponds to the emphasis placed on durable items by early level of living scale researchers (Chapin, 1935, Sewell, 1940). In fact, level of living is most often measured as a composite of durable possessions, perhaps because these are easily measured, widely accepted (and available), and are relatively enduring. Even though three other scales (vehicles, investments, and leisure) were part of the overall level of living index in this thesis, level of living was most strongly related to durables.[27] Level of living may therefore be considered largely a measure of tangible goods, as it was in the traditional sociological approach (Chapin, 1935, Sewell, 1940). It should be remembered, however, that conflicting relationships between the component scales and the independent variables could cancel out significant relationships with the total level of living index.

The predictors of credit card use (income, occupational status, and education) and debt (income, social class, and length of stay) show that these two consumption types may have more in common with the durables or investment indices of consumption than with any other consumption scale. From the lack of significant correlations between credit card use and resource town variables like length of stay and sector

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[27]The zero-order correlation with the durables scale was higher (0.780) than with any of the other three scales, and the three best predictors of the durables index were the same three that predicted overall level of living.

of employment, and from the resemblance to the results of urban studies (Mathews and Slocum, 1969, Slocum and Mathews, 1970, Plummer, 1971) it appears that credit card use is relatively unaffected by the resource town setting. The significant predictors of this form of consumption are virtually identical to those stressed in the literature (Mathews and Slocum, 1969, Plummer, 1971) and are, as suggested, a function of stratifying variables (Segal and Felson, 1972). One may conclude that credit card use is perceived as a "modern and convenient" way of consuming by well educated, affluent, higher status persons and that this belief does not fluctuate within the nature of the consumer setting (Plummer, 1971:41).

Debt seems to be somewhat influenced by the nature of the resource town. Income and not occupational status affects one's debt. Since incomes are generally high for a wide range of occupations in resource communities this means debt should be more pervasive than in more traditional income/occupation stratified centers. This was also the only consumption measure for which social class was a significant predictor. Those with more control over work (professionals, managers, technical experts) have more debt. Whether this is because they can borrow more easily (since they are considered bettter credit risks by lending institutions), or because they choose to do so (since they can conceive of more uses for the money, for example) cannot be determined in this study. One suggestion made in the literature, and

refuted by the results of this study is the idea that persons at the beginning of their career with high occupational status and low incomes compared to older members of their professions go further into debt to acquire a "suitable" lifestyle for their status position.

There is some evidence of an entrappment syndrome, a self-perpetuating consumption/debt cycle (Gartrell et al, 1980). Persons who have stayed longer in the community have higher overall levels of consumption than short term residents. Generally, the longer one stays the more vehicles, durables, and investments one will possess and the more in debt he or she will be. This implies that consumption has expanded beyond available income so that the solution to getting out of debt is to stay and work for resource town wages.

The most anomolous scales from the point of view of homogeneity of predictors were the vehicles scale of consumption and the leisure index of consumption. Leisure consumption is clearly distinguishable from the other types of consumption examined in this thesis. Contrary to the relationships between age and investments, for example, youthfulness increases leisure consumption. Similarly, while being married increases the consumption of vehicles, durables, and investments, it decreases the consumption of leisure. The stratification variables do not provide satisfactory explanations for this type of consumption. In fact the low R squared for the leisure variable is

indicative of the need to search for more and better predictors of this consumption scale. The type of leisure studied here does not appear to be status conferring or linked to status distinguishing lifestyles.

Relative to the possession of concrete durables or vehicles, leisure is an ephemeral form of consumption embodying a short (day to day) perspective. Heavy consumers of leisure, young, single persons, typify this "live for the moment" attitude. Whatever their reasons, they seem to prefer present indulgence to long term benefits in their consumption habits. The preference of older, married persons for future oriented investment consumption reinforces this conclusion. In sum, leisure consumption is likely to be emphasized by those with a short term outlook who see themselves as less settled. Getting married appears to change the locus of consumption from more public places outside the home to the home itself.

While there was some overlap in the predictors of the vehicles scale of consumption and those of household level of living, the durables index and the investment index, there were also several discrepancies. For example, stage in the life cycle and sector of employment were found to be significant predictors of the consumption of vehicles, yet they did not correlate significantly with any other consumption type. The hypotheses presented in Chapter Four were not generally substantiated for this index of consumption either.

The reasons for the failure of these predictions may be the nature of the scale itself. There is no way of gauging the purpose or purposes of the vehicle or the value or value "owned". Furthermore, the pervasiveness of automobiles in Canadian life makes this index vulnerable to the same criticisms as out-of-date level of living scales. Where there is little or no variability it is difficult to uncover the predictors responsible for different levels of vehicle consumption. There is also the possibility that the ubiquity of vehicles has given people a more pragmatic approach to ownership. When an item is as widely available and as within reach of the majority of households as are cars, trucks, *et cetera*, it loses a good part of the status distinction attached to its ownership, even when owned in multiple.[28] Ownership of a particular *type* of vehicle may still be highly prestigious and status differentiating, but the vehicles scale used here was not designed to examine this consumer aspect. Vehicles could be subsumed in an index of durables rather than treated as distinct goods, or less fine distinctions could be made between diverse kinds of vehicles.

This chapter has considered some of the specific and more generalized observations that can be made about resource town consumption. The relevance of these findings for sociological theory and its applications will be

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[28] The saturation (or satiation) point with multiple vehicle ownership appears to be reached earlier than for other goods.

discussed further in Chapter Six.

6. Chapter Six: Conclusions

It was the objective of this thesis to conduct an empirical investigation of factors that influence consumption, particularly the kind of conspicuous consumption that might be expected to prevail in a center of rapid development and attendant prosperity. Fort McMurray was selected as the location for this study because of its expansionist resource-based economy and its reputation as a place to make money and improve one's lifestyle. Relatively uncircumscribed opportunities for material advancement were believed to exist in this resource community. For example, no rigid class boundaries exist in Fort McMurray and wages are generally higher than the Alberta or Canadian average. In this chapter these specific objectives are linked to the study of the sociology of consumption and the results are reviewed in terms of their theoretical and practical implications.

6.1 Theoretical Perspectives on the Stratification of Consumption

Sociologists' approach to consumption rests largely on an assumption that the "degree of differentiation in material lifestyles . . .[is] an important and visible aspect of differentiation in social life in general" (Felson, 1976:397). In this model consumption is a manifestation of material lifestyles which in turn are status differentiating and derived from social status or

prestige in the Weberian sense, that is, status groups characterized by a common lifestyle and a feeling of membership (Segal and Felson, 1972). Segal and Felson (1972:161) suggest that "the quality of material consumption can be seen as an attribute of status" in its "reflection of a man's position-- achieved or ascribed-- in the stratification position" [Weber] or in its "claim to increased status through conspicuous consumption" [Veblen].

If status groups can still be distinguished by their lifestyles as Weber hypothesizes, stratification variables (especially occupational status) should have been important predictors of consumption in this study. Occupational status, the measure most closely resembling Weber's status concept, was significantly related to material lifestyles. In particular, higher status persons have a lifestyle that emphasizes the possession of durables and investing, makes more use of credit cards, and accumulates more debt. Their world view seems to be more assertive and controlling. For example, they invest to control their future, are not afraid to accumulate debt, use credit cards casually as modern conveniences, and buy visible evidence (durables) of their taste. This lifestyle is not unsupported, since economic class (income) is significantly related to the same forms of consumption as occupational status, except for the overall level of living index, and income and occupational status are significantly related themselves (0.277).

There may be good reason for the absence of any relationships between income and certain consumption measures (level of living, vehicles, and leisure). Felson (1974) writes that "the rising median level of per capita prosperity over the past half century has decreased the family's dependence upon income, thereby reducing income stratification of lifestyles" (Felson, 1974:35). However, income as a source of inequality in lifestyles is not dismissed by Felson. He says that while inequality in any one type of consumption may actually be growing, it is obscured by the lack of "visible inequality" in the whole range of consumption (Felson, 1976:418). Consequently, "as income inequality persists, its manifestation in material lifestyles may be confused enough to mask the degree of *visible* inequality" (Felson, 1976:418, original emphasis).

There is some reason to believe that this is true of Fort McMuray. The generally high incomes and conspicuousness of consumption may conceal persistent inequalities. Leisure is likely to be economically within the reach of more people than investments. What appears as a consumption choice may really be a muted reflection of ability to consume. Consumption may serve both status needs and material satisfaction, and since people tend to favour consumption they can afford, it is very possible that the variety of choice is hiding consumption inequalities, as Felson (1976) argues.

While consumption appears to be stratified by occupational status and income, particularly when different types of consumption are examined, stratifying variables like social class, sector of employment, and level of education have little effect. Marxian class divisions (sector of employment and social class) seem relatively unimportant in this resource community. A major caveat to this conclusion is based on the high correlation of occupational prestige and social class in this study (r=0.722). Much of the *meaning* of prestige differences in Fort McMurray was the simple "labour-controller" or "labour-controlled" division identified by the social class variable. Consumption in Fort McMurray is divided along class and segment (core-peripheral) lines insofar as these differences are reflected in income and occupational prestige differences, which they appear to be highly affected by in this community.

The question of whether apparently homogenous lifestyles are masking inequalities in resource communities is especially relevant when one considers Goldthorpe and Lockwood's (1963,1968,1969) work on "affluent" workers and the theory of embourgeoisement. Resource towns are often presupposed to be in the forefront of social changes like embourgeoisement or the general societal leveling discussed by consumption theorists. Migration to resource communities is linked to materialistic desires such as highly acquisitive consumer ambitions and the desire to make more

money (Goldthorpe et al, 1969, MacKenzie, 1974, Gartrell et al, 1980). Common consumption desires and material lifestyles are surmised to be part of the general blurring of class lines. The feeling of being "economically equal in terms of income and material possessions" can give workers a sense of "middle-classness" when in fact "working class prosperity . . . is not in itself a *sufficient* basis for *embourgeoisement*" (Goldthorpe and Lockwood, 1963:144,149, original emphasis).

The relative openness of resource towns should also be considered here. With the absence of elites and the new, transient nature of these communities there may be fewer (felt) taboos and mores about the appropriate style of life a worker should present. This outlook is compatible with the leveling hypothesis which would suggest that differences in consumption are not related to either class or status differences. Since the Fort McMurray data suggest that consumption is stratified by status and class (income or otherwise), both the leveling hypothesis and the embourgeoisement thesis can be rejected with a few qualifications.[29]

Of the most clearly stratified types of consumption (durables, investments, credit card use, and debt), income is always a significant predictor, but in conjunction with occupational status or social class. This implies that,

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[29]Since previous stratification by consumption is an unknown quantity it is possible that some leveling has already taken place outside the context of Fort McMurray or earlier in the community's history.

consumption ambitions notwithstanding, both higher incomes and higher status result in significant lifestyle differences.

Vehicle consumption, overall level of living, and leisure are considerably less influenced by variables of stratification. However, this result too can be explained in terms of Felson's conclusions. For instance, level of living may appear less stratified because it measures a wide range of goods and services that are themselves significantly different along stratification dimensions. This same argument is applicable to the vehicles index, in that widespread car ownership may be hiding critical differences in possession by *type* of vehicle, (especially the more prestigious and expensive ones).

These findings are also relevant to Veblen's observation "that visible consumer traits serve as an important mode of communication of social differences" (Felson, 1976:398). It is important that leisure, a less tangible type of consumption seldom associated with the possession of objects, is not status differentiated in Fort McMurray. Rather it is age differentiated and varies with marital status. It is easy to conceive of material possessions, particularly houses and their contents as overt symbols of status and status improvement, but what of less visible forms of consumption like credit card use, debt, and some investments? This less obvious consumption does not appear to fit Veblen's assumptions anymore than does

leisure, but it can be explained in the context of status group commonality of lifestyles.

To summarize this discussion, consumption appears to be stratified in Fort McMurray along occupational prestige and economic class dimensions. Material lifestyles in this community do reflect position in the stratification hierarchy and status group membership as Weber theorized. Whether or not people have similarly high consumption aspirations in migrating to resource towns, those with the higher incomes and status are more likely to achieve high levels of consumption. Living in a resource town seems to have a positive influence on consumption (as the significance of length of stay as a predictor demonstrates), but there is no evidence to suggest that basic inequalities as manifested in lifestyles are inherently reduced. When everyone consumes more in a resource town situation relative differences in consumption levels between status groups remain the same.

Similarity of material lifestyles is often mentioned as evidence of embourgeiosement and general societal leveling. The results of this thesis suggest that in Fort McMurray at least, consumer variety and lifestyle options may be hiding economic inequality in the labour market (Felson, 1978). In short, when this data was collected there was no reason to believe that any leveling process or relative change in class positions (embourgeoisement) had taken place.

While lifestyles may be differentiated by status criteria, it was difficult to evaluate Veblen's view of consumption as a way to increase status. Certainly, visible consumption may convey an acquired (or ascribed) status position, however this does not imply that people engaging in significantly higher levels of consumption are seeking higher status.

6.2 The Domain of the Sociology of Consumption

Nicosia and Mayer (1976) explicitly identify the concerns of the sociology of consumption as:

> "the institutional arrangements of consumption activities in affluent societies . . . the cultural values and the social organization of consumption activities . . . and the changes in a society's consumption activities and broader social change" (Nicosia and Mayer, 1976:69,71,72).

These authors further note consumption is a "fundamental social indicator" that may be "relatively more important" in 'post-industrial', 'materialistic', 'service-oriented', or 'affluent' societies, such as Canada (Nicosia and Mayer, 1976:68).

This study of resource town consumption does not reveal as much of the institutional organization of consumption as it does cultural values and social change. Consumption has a strong influence on migration to resource towns. Achieving higher levels of consumption is definitely a motivating goal for resource town residents and one that is generally fulfilled. The satisfaction of attaining a higher level of consumption (relative to pre-move levels) appears to be an

adaptive and integrative mechanism in the societal context. That is, satisfaction with material lifestyles may compensate for perceived deprivations of resource community living, and may also make (social) inequalities more palatable.

There is a second way in which consumption may serve as an integrator of persons in unequal situations. Consumption is often pointed to as evidence of the leveling and equality in post-industrial societies, probably because of its high visibility. The variety of consumption choices and the possible permutations of material lifestyles may *mask* real inequalities of income or work situations (Felson, 1976). Apparent equality and freedom of consumer choice can promote acceptance of the *status quo*.

Consumption can also be a reflection of how people view their life situation. For example, consumer aspirations of married versus single persons or young versus older people are different in this resource town environment. Young, single persons see in consumption the chance to "have a good time" and meet people in a public atmosphere while older or married persons see it as the chance to acquire more household goods, or make investments for when they leave the community. Pressure to achieve these ambitions may cause longer term residents to emphasize different types of consumption. They may concentrate upon consumption that will get them out of the town, but still maintain this material lifestyle. This may be critical in determining who will work

longest and be happiest in resource communities and is therefore of interest to all those involved in the development and planning of such towns.

The unstated variable operating here is consumer priorities. When income is limited, consumption choices are based on what is currently most important to a person, and these priorities can shift, with length of stay for instance, or with a change of status like marriage. Consumption priorities are of importance to those studying the value system of society and are pragmatic indicators of desired consumer services. Consumption priorities shed light on underlying cultural values, as for example, when a difference is found between persons who engage in "home centered" as opposed to "public centered" types of consumption. This is found in leisure where young and single persons engage in more public centered kinds of leisure activities and older, married residents, by implication, prefer more home centered leisure consumption.

Reviewing the implications of the study results has the secondary effect of identifying the theoretical and research lacunae in the area. This suggests some possibilities for further work in the sociology of consumption in general, and resource town consumption in particular.

6.3 Research Suggestions

There is a call for an imaginative search for new, more diversified predictors of consumption. Starting from the traditional jumping-off point, at income, and working through the usual socio-economic status and demographic variables is not enough. Particularly in little investigated arenas of consumption like leisure, a wide range of independent variables should be tested for significant correlations. Then too, there is a need for further research that treats consumption as a series of distinct entities and identifies the predictors associated with each type individually, as well as in a holisitic manner. The development of theory can follow this when the investigator "looks for a small number of organizing principles which structure consumer behavior" and considers "how one type of consumption helps organize another" (Felson, 1975:37).

Secondly, longtitudinal data is needed to compare consumption at several points in time. In particular, this would provide further evidence with which to evaluate the two hypotheses central to a dynamic theory of consumption, leveling or stratification. There may be a difference in such effects by type of consumption and this too needs to be examined.

Comparative studies add greatly to the understanding of a variable like consumption, and provide the basis for the development of theory on the subject. Studies of consumption in other resource communities would be useful in evaluating

both the soundness of the findings here and the extent to which these findings can be generalized to consumption in any resource center. Another pertinent comparative study would be to duplicate this research in an urban center and in a rural center without a resource-based economy.

On another level, research could be done to investigate the priorities and trade-offs between types of consumption. This would allow the comparison of spending by household on several different scales of consumption and analysis of the patterns over a large sample of households. Some research has concentrated on uncovering priorities of consumption by studying the order of acquisition. The results of this thesis suggest that certain types of consumption may predominate in some households while others may have a more balanced flow of consumption.

The most critical need is for the development of theory treating consumption as an indicator of societal values or institutions, and of social change (Nicosia and Mayer, 1976). One can then consider how affluence affects societal values and structure through its emphasis on material lifestyles, and whether the absence of such a consumption emphasis results in a different organization of society (for instance, in developing nations). This resource community research intimates that consumption may be linked to migration and satisfaction at work and outside work (Goldthorpe et al, 1968). Foxall (1974) writes that "the study of consumption and buying behaviors and their effect

on dispositions towards work activity is, as yet, a totally unexplored area" (Foxall, 1974:132). Further research is needed to establish the nature of these links.

While there are many possibilities for future consumption research, the role of the sociologist is summed up by Foxall (1974):

> ". . . it is in the study of buying and consumption as socially determined activites that the sociologist can make a unique contribution" (Foxall, 1974:132).

Using an empirical approach, this thesis has concentrated on the identification of elements of consumption in a resource town setting. The relationships between different indicators and different forms of consumption were discussed in terms of their implications for the understanding of society. Consumption's role in perpetrating or diminishing status differences in the stratification hierarchy was emphasized. It is hoped that this study will provide a pragmatic stimulus to further research in the area.

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APPENDIX A

7.1 Items in the Consumption Scales

7.1.1 The Vehicles Index

1. cars
2. boats with motor
3. boats with no motor
4. mobile home
5. camper vans
6. camper trailers
7. jeeps
8. motor cycles
9. snowmobiles
10. truck campers
11. trucks
12. vans
13. other

7.1.2 The Durables Index

1. dishwasher
2. microwave
3. gas B-B-Q
4. food processor
5. golf clubs
6. skis

7. guns
8. automatic washer
9. dryer
10. freezer
11. garborator
12. stereo
13. pool table
14. bicycles

7.1.3 The Investments Index

1. single detached house
2. own or lease-purchase
3. house unsubsidized
4. second home/cottage
5. other property
6. shares, stocks
7. bonds
8. R has RRSP
9. R has RHOSP
10. Insurance on self

7.1.4 The Leisure Index

1. days away from Fort McMurray in the last year (Var253)
2. frequency R went to movies in last month (Var403)
3. frequency R went to a bar or lounge in last month (Var404)

4. frequency R went to a restaurant in last month (Var405)
5. frequency R entertained at home in last month (Var406)
6. frequency R attended cultural activities in last month (Var407)

Standardization of the Leisure Index

Leisure=((Var253-26.042)/32.834)+((Var403-0.749)/1.447)+
((Var404-2.135)/3.672)+((Var405-4.087)/6.640)+
((Var406-4.029)/5.522) +((Var407-0.414)/1.230)